

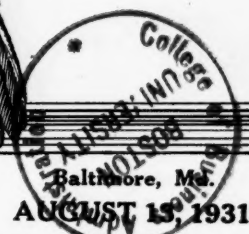
Manufacturers Record

Pat. Office

Industry Construction



\$6.50 per Year
Single Copy, 20 Cents



The Menace of the Dole

Movements for the dole direct, and for various "relief" laws as the dole indirect, foreshadow legislation by Congress which would impose further billion-dollar burdens on the oppressed American taxpayer. Direct dole for unemployment is the most conspicuous objective. The dole indirect may be discerned behind certain proposed legislation for World War soldiers and varieties of their dependents or relatives. Debentures legislation is an indirect dole proposed as "farm relief."

The national welfare and the country's fiscal security may well justify taxpayers' protests. Approximately \$15,000,000,000 out of the people's \$90,000,000,000 annual income is now poured into the bottomless pit of taxation. Manufacturing, mining, agriculture and other productive and constructive lines of enterprise well nigh have reached their limit of possible endurance. Public utility taxes amount to about one-quarter of net operating revenue. In the first four months of 1931, more than one-third of their net earnings were paid by the railroads in taxes.

Each billion dollars appropriated for the direct or indirect dole must be taken largely from the pay envelopes and employment rolls of the working men and women in those enterprises. The investors who provide or enable such employment are compelled to divert millions in wage-dollars from industry to the tax collector's till. The butcher, the baker, the grocer, the department store and all trades lose. One billion dollars in wages is of far greater benefit than a like amount in any form of dole.

The devastating effect of the dole on the morale of any people works immeasurable harm, and cannot be computed in dollars and cents.

Ample time remains before the December session of Congress for the people effectively to oppose further class, discriminatory and demagogic raids on the National Treasury. The American taxpayer is the master of Congress and no longer should sit supine as its sweating victim. American labor and capital, as partners in industry, owe it to themselves and their dependents and the Nation to forestall the threatening orgy of the dole.

Economy

The more you investigate and compare roof materials, the more convinced you will become that there is *one* basic material which stands out sharply because of its *greater value*:

- - greater value because it saves structural steel tonnage
- - greater value because it requires no maintenance expense
- - greater value because it is fireproof
- - greater value because of its insulating qualities
- - greater value because it lasts indefinitely.

This material is in the form of

Featherweight Concrete INSULATING ROOF SLABS

—made of Haydite aggregate instead of sand, and weighing as low as 10 lbs. per sq. ft. They go on the same light steel frame that carries other roofs.

Millions of square feet are giving perfect service today on buildings of all kinds — industrial, utility, railroad and public. Our quarter century of experience can help you save money on your own roof projects. Send for "Catalog and Roof Standards".



Columbia Radiator Corp., McKeesport, Pa., Gray Iron Foundry, covered with Featherweight Concrete Insulating Roof Slabs.

These slabs make the most satisfactory foundry roof available because they are immune to heat, fumes and gases.

Made, Laid and Guaranteed by

FEDERAL-AMERICAN CEMENT TILE CO.

Executive Offices: 608 South Dearborn Street Chicago
Plants near CHICAGO . NEW YORK . PITTSBURGH . BIRMINGHAM
FOR OVER A QUARTER CENTURY

THIS
IS
PAGE
3

—reach without
the hoist cable
pulling against
the crowd.

—greater cut-
ting force at the
dipper lip for
handling harder
digging

The Northwest with the Close Quarter Independent Crowd reaches out in one smooth operation spotting the dipper high without having to juggle the levers to hold it up. The Close Quarter Independent Crowd eliminates the 25 to 30% waste of power always present where hoisting and crowding are performed—by separate mechanisms, bringing you 25% greater cutting force at the dipper lip. Ask about these features.

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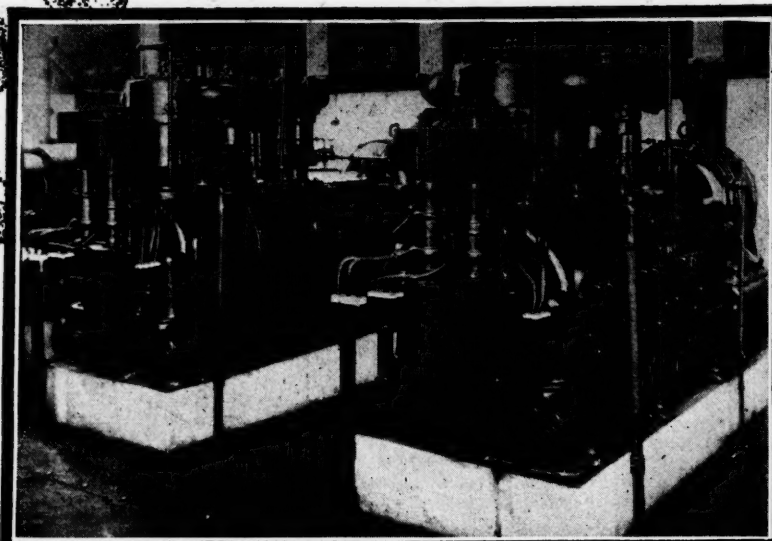
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315 Howard Ave.
Baltimore, Md.
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NORTHWEST



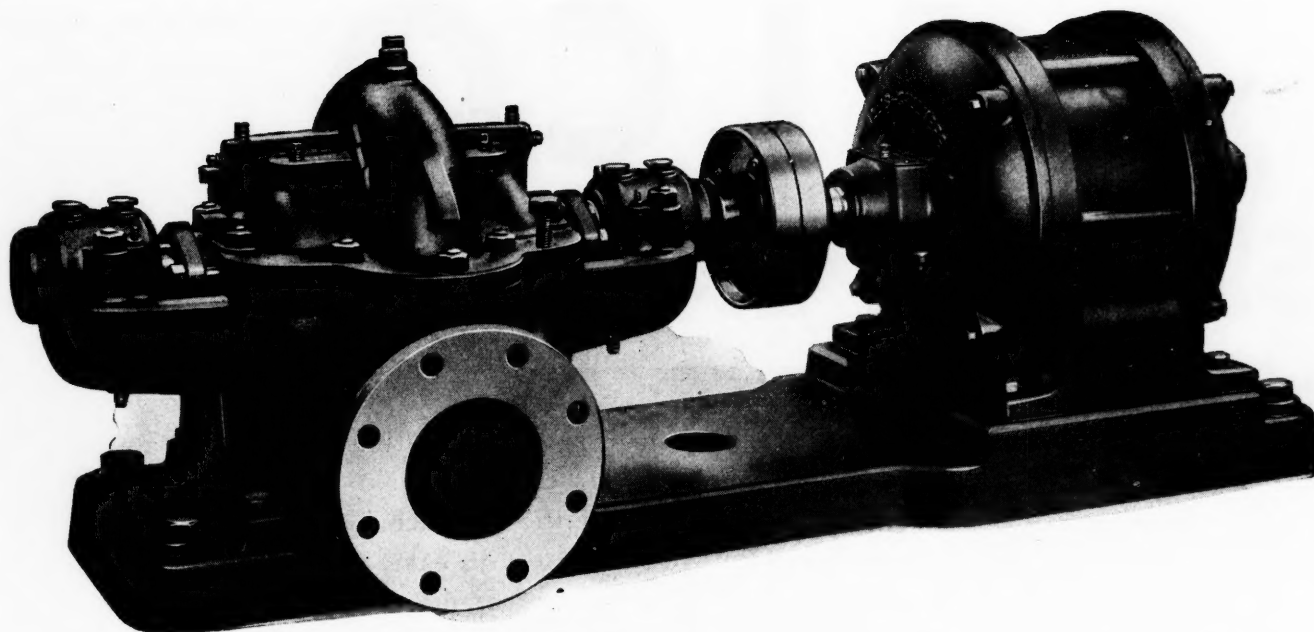
a
"baker's dozen"
in AIR COMPRESSOR VALUE

JUST as the old-time baker threw in an extra bun for good measure, so the builders of Westinghouse-National Air Compressors add extra value to the machines they build . . . They save valuable space for the user by designing compact machines that are driven direct by the motor or through efficient herringbone gearing . . . they save installation cost by making complete self-contained machines that need no elaborate foundation nor require extensive auxiliary apparatus . . . they save operating expense by providing complete Automatic Control of distinctive type—which insures that the power consumed will be in proportion to the air compressed . . . they save maintenance expense by building durable machines that will operate for a score of years with minimum time and material for attention and upkeep—thus maintaining the noteworthy tradition of "Quality Machines for Quality Service" . . . Sizes range from 2½ to 700 cu. ft. displacement—suitable for every pneumatic requirement.

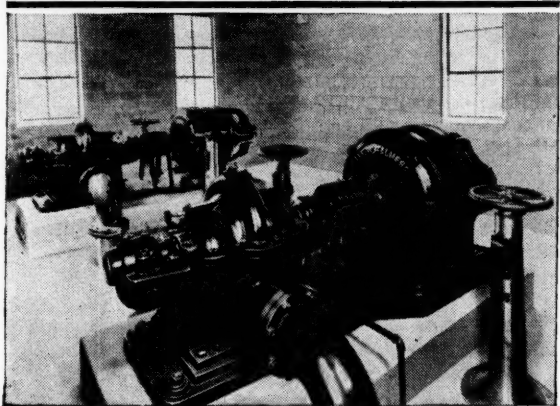
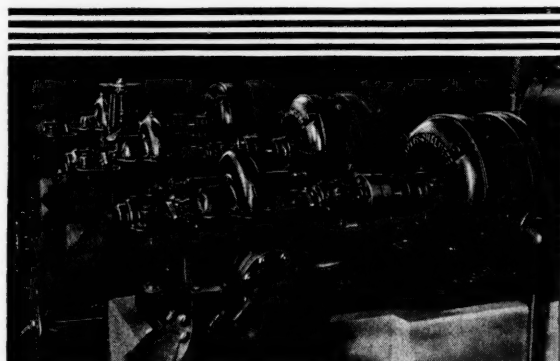
WESTINGHOUSE TRACTION BRAKE CO.

Industrial Division . . . Pittsburgh, Pa.

WESTINGHOUSE-
NATIONAL
Air Compressors



... a widely used unit for General Purpose Pumping



One of the most popular of the many types of Allis-Chalmers centrifugal pumping units is the type "S", for handling general pumping requirements. This is an improved double suction, split-casing, bronze fitted, horizontal shaft pump designed for long service and high efficiency at a reasonable cost.

Type "S" units, both pump and motor are built by one company and sold as combined units, give the most pumping value per dollar. All parts, including base plate, are taken from stock with the pump runner selected to meet the requirements for the particular service intended. Then the unit is tested for head, capacity, and efficiency.

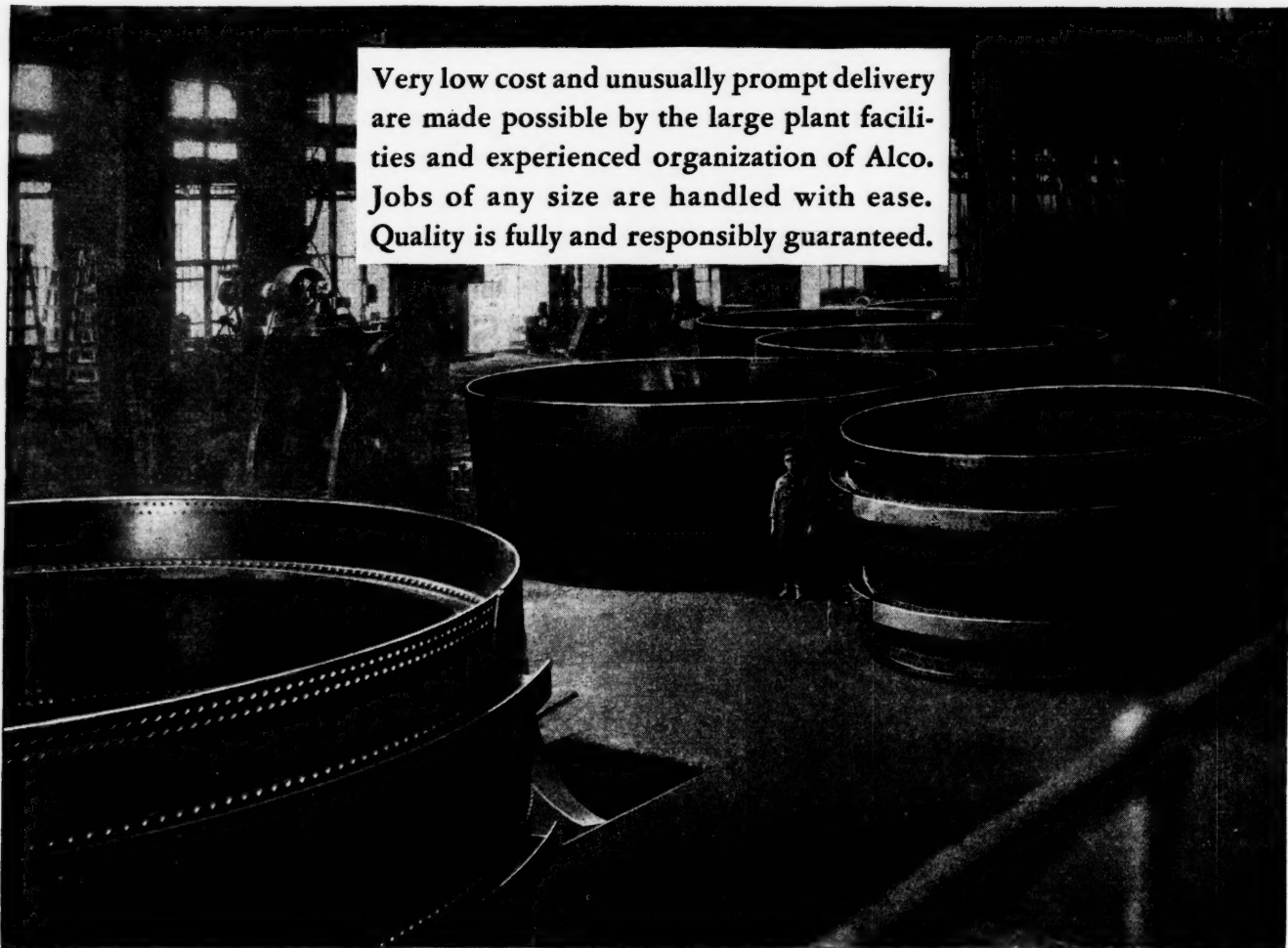
Standard Type "S" Units are built in capacities from 30 to 30,000 g.p.m. and for heads up to 300 ft. These together with other types of single and multi-stage Allis-Chalmers pumps, so satisfactorily take care of most pumping requirements that it should pay you to write for our recommendations when considering pumping equipment.

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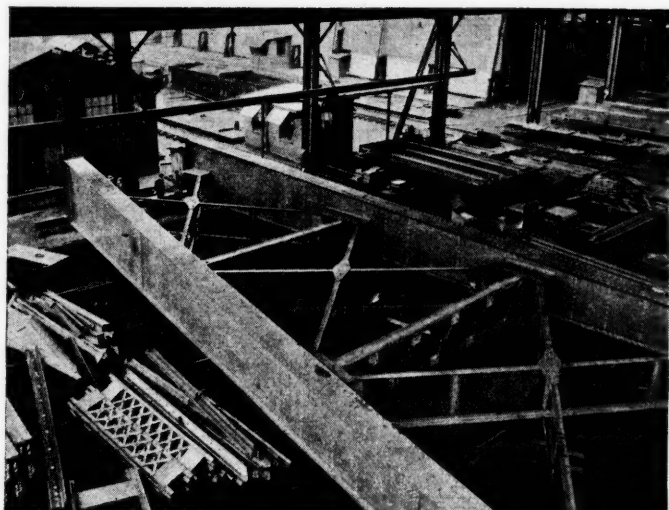


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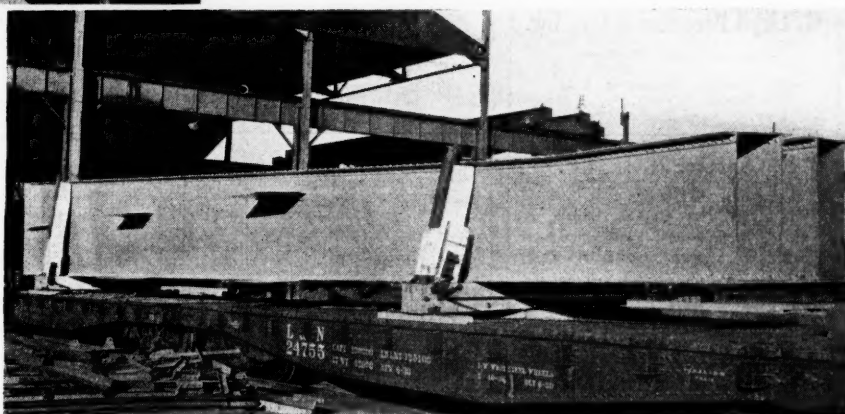
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MAIN OFFICE: 220 East 42d St., New York • DISTRICT OFFICES: McCormick Bldg., Chicago, Ill.; Terminal Tower Bldg., Cleveland, Ohio; Esperson Bldg., Houston, Tex.; Philtower Bldg., Tulsa, Okla. • Plants at Dunkirk, N. Y., and Montreal, Can. • Cable Address: Alproducts

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These two pictures show sections of the main steel work being manufactured and shipped from our Birmingham Plant for the 350-ton Gantry Crane built by the Whiting Corporation for the Ariel Dam, Woodlawn, Wash. Below is the completed crane in operation. Phoenix Utility Co., New York, Engineers.

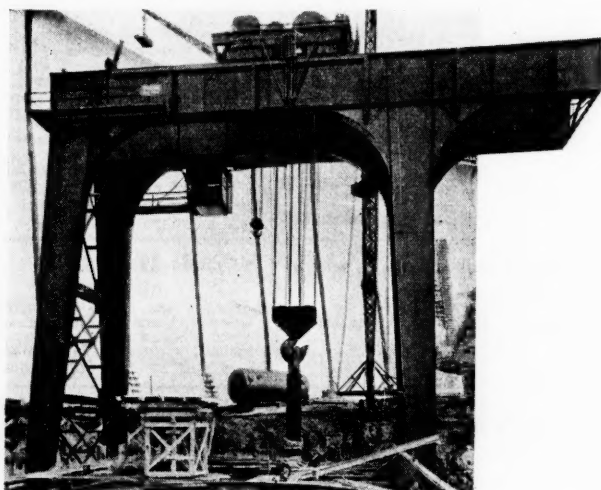


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GRIST TO THE MILL

**Careful Shop Work Insures
Good Fit and Speedy Erection**



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We have had many years experience on many different kinds of work, and shall be glad to give you our best thought on your problems of design and construction, steel or possible steel.

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We Test Coal, Clays and Mineral Properties. Foundation Testing, Dams, Bridges, Buildings, Wash Borings, Dry Samples.

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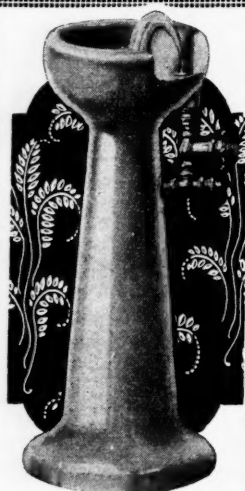
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LIPS CAN NOT TOUCH THE R-S NOZZLE



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To enlarge your share of future contracts follow every day

Daily Construction Bulletin



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Average number of Cars handled per month	Average number of hours of operation per month	Average cost of operation per month
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For any heavy switching operation, short line railroads, secondary service and industrial switching, Whitcomb locomotives have characteristics that enable them to operate at marked savings.

Whitcomb locomotives have exclusive features giving them maximum power, superior flexibility, low fuel cost and low maintenance cost. One man is a complete Whitcomb crew—there is no standby expense—no time lost for water, fuel, cleaning of fireboxes or flues. The Whitcomb has fuel capacity for 24 hour service—tremendous power—genuine day-after-day stamina under the toughest conditions.

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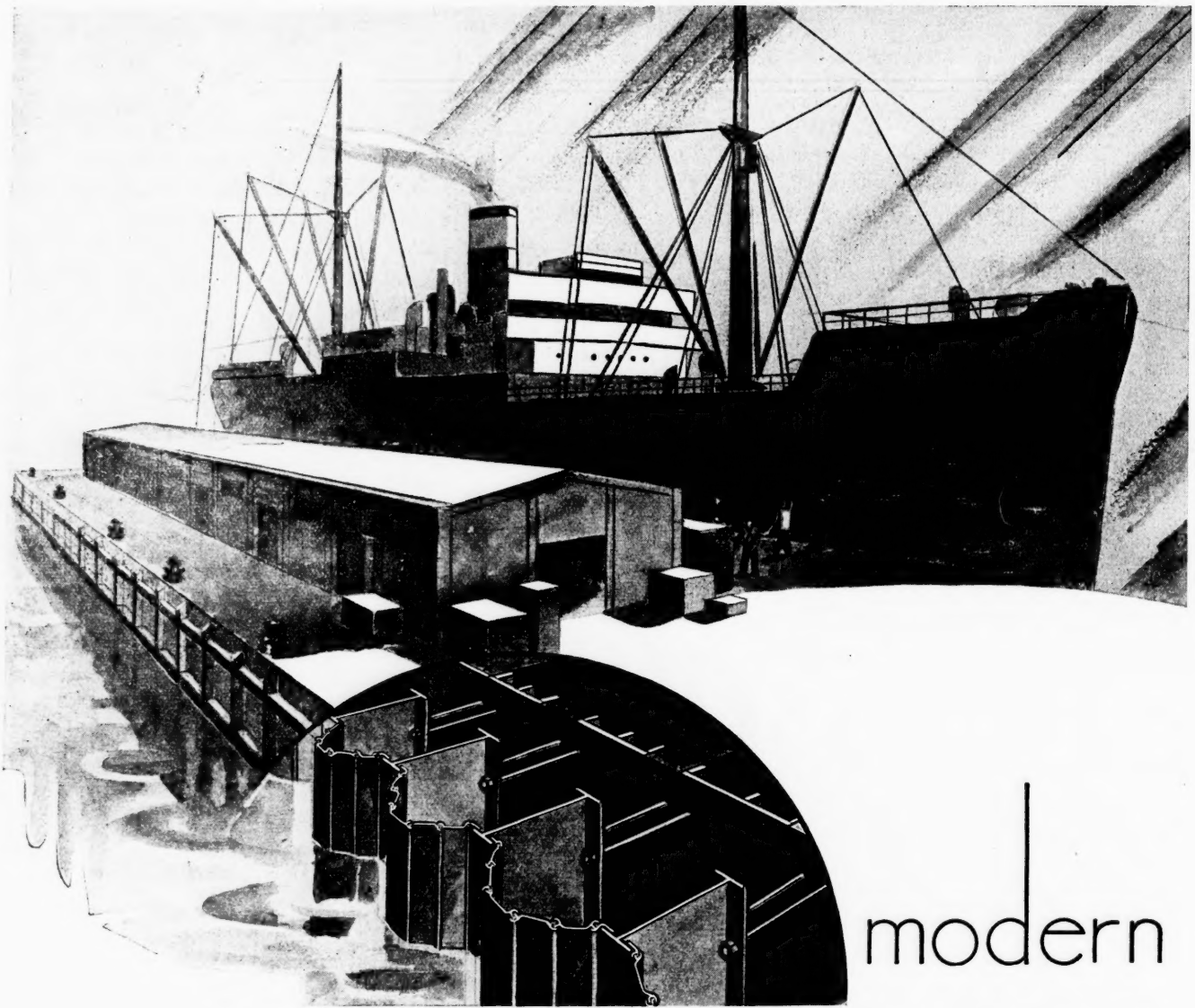
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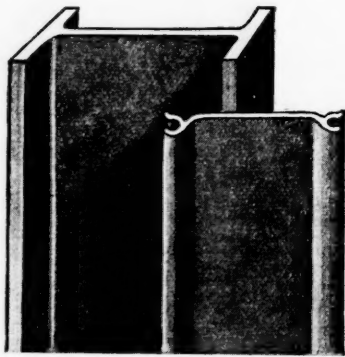
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Baltimore, Md., August 13, 1931

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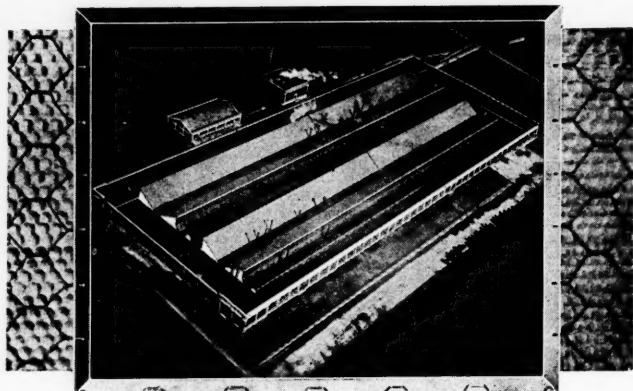
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Vol. C No. 7 }
Weekly }

BALTIMORE, AUGUST 13, 1931

{ Single Copies, 20 Cents.
{ \$6.50 a Year

Rays of Sunshine

IT is the well-considered belief of the MANUFACTURERS RECORD that our predictions for a superlatively distressful winter are to be taken with at least one grain of salt. Hardship will be felt and comparison of the lean year with fat years of the past will be apt to emphasize the situation. But indications are far from few that confidence for the future is justified, and intangibles here and there may well inspire hope.

Cold statistics on which to base a spirit of comparative cheer may not be obtrusive at the moment. At the same time it well may be that economists and the people have over-emphasized the importance of bare figures. Statistics and figures are not the basis of sound business. All business is founded on such intangibles as confidence and courage, and cheerfulness and goodwill. Evidence is not wanting that these factors in the American morale are rising steadily from submergence toward a higher level.

Outstanding in the justification for reasonable optimism is the elapse of time since the genesis of the depression, in the autumn of 1929.

The composite securities price was not the only, or most important, bubble which burst in that year. Nor was it the only one heavily inflated. Production in a score of industries had been maintained in huge volume, despite actual knowledge for long time in those industries that the output could be marketed often only at a loss and through cut-throat competition. Industrial production was over-inflated and deflation was inevitable. In some measure and in some lines, even purchasing was over-played and commitments were undertaken by a large percentage of the people beyond the limit of a sound family budget. So it was that the great national volume of production and domestic buying was halted at the drop of the hat,

and matters were made worse by curtailment of orders from foreign purchasers. It is of no profit to recall in detail the trend of conditions in the 22 months which have ensued.

Indications are discernible which impel belief that the conditions which actually occasioned the great depression have been largely counterbalanced by the passage of time. Increasing demands at department and other store counters inspire replenishment of stocks which had shrunk to featherweight proportions. Construction work of a hundred types and a thousand projects cannot long be satisfied with 30 per cent capacity steel production, and the stretch from that point to a profit-yielding 60 per cent will not require long time to cover. Reports from Detroit record "material increase" in the retail sales of automobiles. A \$12,000,000,000 composite agricultural crop is in course of reaping and will be translated largely into terms of spending money. Private information from individual bankers and manufacturers and business men convinces the MANUFACTURERS RECORD that many tender spots are healing progressively.

Significant is the confidence and determination with which the so-called small manufacturing plants are moving toward normal operation. Ninety-eight per cent of American industrial plants individually employ only 500 workers or less; 96 per cent of all plants employ 250 or less, each; 87 per cent employ not more than 100, each, according to the National Industrial Conference Board. The industrial stability of the land does not depend in toto on the monster plants with 1000 or more workers on each roll, which form less than 1 per cent. Great companies loom large in the news and stock market reports, but in the last analysis the so-called small plant is the backbone of industry. The "little fellow" is displaying a return of courage and energy in the nature of a national inspiration.

Also virtually unnoted, yet of genuine significance, is indication that the women are opening more widely

their pocketbooks and purses. The new fashions, one hears, have created an interest that takes the form of dollars, rather than mere expressions of delight. New styles in shoes and hats and dresses, in coats and cloaks and many other articles, are reported as enticing money out of retirement into circulation. And behind this concrete stimulation of trade is a strengthening of morale and an inspiration of cheer which tend to promote further spending.

Finally, it may be cited that enormous expenditures authorized by the Federal Government and by states and lesser units are now getting into full swing. A hundred millions of dollars for construction work cannot be properly spent offhand; months of preparation are necessary, as Secretary Mellon has pointed out. The months of preparation for many authorized projects have reached the point of actual work; the months of planning for other projects draw nearer to a close. The letting of \$44,600,000 in public works contracts in the week ended August 1, and of similar sums in almost each successive week, is proof that the day of preparation has developed into the day of fulfillment. This general work will run well through the winter, and in much of the South, because of climatic conditions, will suffer little interruption by unfavorable weather.

The value of this work in terms of employment may be gathered from an estimate that 6,000,000 persons are unwillingly out of work and from the census of 1930 that the manufacturing industries employ 8,500,000. From this, it is evident that a major percentage of the unemployed are not normally engaged in manufactures, and the projects under way and soon to be started should take care of a great army of the idle.

Two backgrounds are presented for the picture to be painted next winter:

1—Absence of spectacular or conspicuous indications of improvement in business at the present; dolorous predictions by statistical addicts; depressing agitation by politicians; fear of loose legislation by Congress; unjustified emphasis on the influence of foreign economic conditions on the welfare of the United States; conspicuous displays of unfavorable features in the columns of the press; continued despondency in some minds, which has become almost a habit.

2—Scores of millions of men and women at steady work, at wages which amaze other lands; a bulwark of approximately \$29,000,000,000 in savings between the average American family and destitution, or even want; ever-growing requirements and demands for clothing and a thousand everyday articles; hundreds of millions of dollars of construction under way and other hundreds of millions about ready for the start; depletions of inventories in every line, to inspire orders for all kinds of industry; disregard of politics and Congress by the people at large; the resilience and courage and optimism characteristic of the American people.

Information and observation impel us to accept the latter as the more appropriate setting for the winter picture.

Cotton Acreage Legislation

ONCE more, with the price of cotton far below cost of production, there is agitation in some quarters to limit the planted acreage by legislation. A bill has been introduced in the Texas Legislature to set certain restrictions on cotton growing in that state.

There is doubt as to the constitutionality of a law limiting crop acreage. Farmers, the most independent body of producers in the nation, would be the first to question the right of government to say whether they should or should not plant cotton. Such a law would interfere with the individual's right to work at an occupation which in itself is not harmful to humanity. It is no crime to produce more than can be consumed, although it is contrary to sound economics.

We have passed through several costly experiences in trying artificially to control prices by governmental edict. Is it any more reasonable to expect that greater success may be obtained through legislation against large cotton crops? It is conceivable that exceptionally favorable weather might produce an abnormally large crop on a decidedly smaller acreage. Were we to succeed through legislation in curtailing cotton acreage, without regard to improving yield and quality, what would the foreign cotton grower, including Russia, be doing in the meantime? Foreign cotton acreage has been steadily increasing and nearly one-half the world's cotton is supplied outside the United States. For every acre taken off the American crop there would be added soon an equal area to the cotton crop of foreign countries.

American Cotton Acreage and Production

	Planted Acreage	Picked Acreage	Production of World's (Bales)	Percentage Crop
1925	48,090,000	46,053,000	16,103,000	57.7
1926	48,898,000	47,087,000	17,978,000	64.2
1927	41,905,000	40,138,000	12,955,000	54.4
1928	46,946,000	45,341,000	14,478,000	56.5
1929	47,067,000	45,793,000	14,828,000	56.6
1930	46,191,000	45,218,000	14,243,000	54.1

It is of interest to note that the average American cotton crop harvested in the past eight years has been taken from 43,500,000 acres, as compared with an average of 33,600,000 acres for the preceding eight-year period. Meanwhile, production of foreign cotton has increased and no doubt would have increased a great deal more had not the excessive American production tended to lower prices.

The only salvation for the cotton farmer of the South is for each individual to refrain from planting too much cotton and to grow it on the best of the cotton land at the lowest cost possible, all the while endeavoring to raise the quality and increase the length of the staple. Better cotton on fewer acres, as the MANUFACTURERS RECORD has repeatedly emphasized, should be the objective. With so much of the world's area suitable for cotton production, for any single state or for the South as a whole to attempt to legislate on the quantity of cotton to be grown, means that

it would not be long before the Southern cotton farmer would find himself in the fix of the British controlled rubber industry—up against a rapidly expanding production in countries outside the controlled area. In cotton, as in rubber, coffee, sugar and other products where attempts have been made artificially to control production and prices, the law of supply and demand eventually governs the quantity produced. Profitable prices entice new producers and larger production. Low prices tend to weed out the incompetent and to curtail production.

Prosperity cannot be achieved through legislation. Laws cannot force people to produce or to buy more than they are able. Cooperative, free-will effort to stabilize production to demand is one thing; to legislate to achieve the same end is too near communism for the American people. Soviet Russia decrees a 60 per cent increase in its cotton area. But we believe that America will not, through legislation, force a curtailment of its cotton acreage and thus play into the hands of foreign competitors.

Decentralizing Industry

IN discussing the movement of industry to smaller communities, the Roanoke World-News quotes a recent editorial on the subject in the MANUFACTURERS RECORD emphasizing the cheaper operating costs in the South, and makes this pertinent comment:

"So much of emphasis has been laid on 'dull times,' so much talk has been given to 'depression,' so many people have been waiting for 'something to turn up,' or for 'times to change,' so much weight has been given to car-loadings, and steel-production figures, and other indices of trade now considerably below what they were two years ago, that not enough attention has been paid to the quiet, unostentatious establishment of many small industries, not in vast industrial centers, but in towns and villages."

Referring to the concluding paragraph of the editorial which urged the South to encourage continual growth from within through development of its resources by its own people, and to lay now the foundation for future activity, the World-News says:

"Emphasis needs to be laid on the last paragraph relating to growth from within, and to development by the South of its own resources, by its own people. Far-seeing business men, who give thought to community development, are more and more coming to the conclusion that the way to build up industry is not so much by giving tax exemption to the new comer as by encouraging development of the small business enterprises of the locality. Fair treatment of existing business is often of more importance than special inducement to those who may come in, only for the period of tax exemption, and then move elsewhere, and who have no real purpose to become citizens of the community or to take part in its development.

"The move to decentralize business, in the interest of economy of operation and of better living conditions for employes, is already on. Even those who had sensed the trend found themselves astonished by the extent to which it was revealed in the census. It is true that industry is moving to smaller communities in close touch with surrounding agriculture. The ultimate results will be demonstrated not only in a continued growth of the smaller cities and towns, but in a new outlet for the farm produce of the surrounding agricultural regions."

Latin American Trade

AMERICAN business will participate in the development of a much larger foreign trade with Mexico and Cuba in the next ten years. Such is the prediction of F. W. Nichol, manager of the International Business Machines Corporation's foreign organizations in 77 countries. Mr. Nichol has returned recently from an extended inspection trip through the two countries named. He bases his opinion on the "widespread economic growth in Mexico and Cuba expected as the result of governmental encouragement and the further adoption of modern business methods and equipment." He asserts that "both countries are quick to adopt modern methods, due to the fact that many executives and employes are sent to the United States for business training, as well as to the belief prevalent in Latin American countries that improved methods and manufacturing processes are responsible for American industrial leadership."

While the volume of foreign trade between this country and Mexico and Cuba has become large, Mr. Nichol said, there remains a tremendous potential volume capable of development. Realization of this opportunity should stimulate American industry to greater efforts to increase its dealings with these and other important Latin American markets.

Particularly should the Southern States, which now have an industrial capacity in volume and diversity adequate to supply Central and South America with products in demand, seek to cultivate this trade. Favored geographically, the South has developed considerable business with Latin America but not in the magnitude that it is possible to reach. The new air lines offer additional means for quick personal contacts between buyers and producers. Establishment of car-ferry service between Gulf points and Cuba has greatly facilitated transportation of freight. The market is there for proper cultivation, and the South can produce the goods.

Why the Rush?

ANNOUNCEMENT is made that the newly-appointed Muscle Shoals Commission will receive proposals September 1 for leasing and operating Muscle Shoals in the interest of fertilizer production and agriculture. Proposals are to be offered in writing at 10 A. M., that date, at 1734 New York Avenue, Washington, D. C.

It seems scarcely possible that sufficient time is being allowed for the submission of adequate bids, in all their necessary comprehensiveness, on such an important project. However, it is reported that one bidder, the American Farm Bureau Federation, is in sight.

Even on jobs of minor detail and involving far less investigation and preparation the Government usually allows 60 days time for submission of bids.

Cheering Business News

The Viscose Corporation, operating the world's largest rayon plant at Roanoke, Va., announces resumption of production operations on a full-time basis.

The Manistee Crate Mill, carrying the biggest single payroll in the Bradentown (Fla.), section, has resumed operations, with work in sight for an 11-months' run.

The General Tire & Rubber Company reports that 18 per cent more tires were sold in the first six months of its present fiscal year than during the corresponding period of last year.

The General Motors Corporation announces regular quarterly dividends from earnings, which more than cover requirements.

Reports from the Southern furniture making center at High Point (N.C.), indicate the current market is stronger and more optimistic than in the past two years.

The Southern Advance Bag & Paper Company is removing its Howland (Me.) plant to Hodge in Jackson Parish, La. This will double the capacity of the existing Hodge plant of the company. It is also planned to construct a \$100,000 high-tension electric line from Winnfield, La., to supply additional power needed.

The Industrial Cotton Mills, Rock Hill, S.C., are operating day and night shifts, 250 additional operatives having been added to the regular number of employees.

To meet rapidly growing demand for electric power in East Texas, the Texas Power & Light Company is constructing a 132,000-volt transmission line from its Trinidad steam-electric generating plant to Overton, Texas, to serve a diversity of purposes in oil field operations, as well as furnish energy for miscellaneous industrial, commercial and agricultural requirements in a thriving section.

The Hardwick-Etter Co., Sherman,

The MANUFACTURERS RECORD will be glad to receive additional items of news similar to those here published.

Texas, has put back on its payroll all former employees and is operating the factory at capacity, producing cotton-cleaning gin equipment.

Since January 1, Tulsa, Okla., has acquired 16 new industrial plants, representing an investment of \$4,000,000, manufacturing more than 100 products of a diversified character and giving employment to 875 men and women. This does not include new industries started by local interests, or expansion of the city's established concerns. Establishment of the new concerns has resulted in a demand for factory buildings, warehouses, railroad sidings and office space.

The Air Wash Co., headed by C. E. Haggarty, is establishing a new plant in Oklahoma City, designed to produce 5,000 washing-machines monthly. Officials announce orders are in hand to keep the plant running at capacity for many months.

In the last six months the Pool Manufacturing Co., with plants at Sherman and McKinney, Texas, has increased production 150 per cent, turning out practically every item of wearing apparel with exception of shoes and hats. Total earnings of employees in June were 90 per cent more than in February. More than 90 per cent of the garments made by the company are of cotton.

A visitor returning from Johnson City, Tenn., reports the automobile trade very active, with no sign of a depression, and in the nearby town of Elizabethton, where the Bemberg Corporation operates its giant rayon plant, there was indication of a capacity output being produced.

Col. C. L. Kidd, president of the Big Jack Co., Inc., Bristol, Va., commenting on the plans of the company for opening a second plant and installation of new machinery in the existing mill, states: "We have had more business offered us during this year than we have been able to take care of. We have been running our plant six days a week with a full force."

A visitor from Memphis says everybody is feeling better in the Memphis territory, crops are more diversified and people are paying cash.

Approximately 100,000 unskilled laborers will be used in the South Texas cotton fields until the last of the year. About 1,000,000 bales of cotton are in sight for picking.

Operating subsidiaries of the National Electric Power and the National Public Service Corporation report an increase of over 20 per cent in kilowatt-hour output compared with July, 1930. The National group, operating almost entirely along the Atlantic Seaboard, is the eastern division of the Middle West Utilities System.

While the country's electric power production for the first six months of 1931 was below 1930 and 1929, the kilowatt-hour output is far in excess of the corresponding period of 1928 and other years. According to the National Electric Light Association, the kilowatt-hour output has been increasing along the Atlantic Seaboard the last few weeks.

The Truscon Steel Company, one of the largest heavy steel fabricators in the country, reports a net profit for the second quarter of this year against a loss in the first quarter. Gross earnings in second quarter were \$5,711,000 compared with \$3,713,000 in first quarter. W. C. Conger, vice-president, in the company's semi-annual report, says: "There is a decided tendency toward revival of business, based on increased inquiries and volume coming to us."

Negro Population and Distribution

By

HOWARD L. CLARK

ONE of the great race migrations of history has been taking place within the United States. Since 1920 the growth of the negro population outside of the South has been twice as rapid as the actual increase in the number of negroes in the Southern States, which have 81 per cent of the country's colored population. The significance of this movement in the last decade in distributing the negro race throughout the country is of far-reaching importance in creating a broader understanding of the race question with which the South has had to deal since slavery days. In some of the larger centers of the North and West the influx of negroes in restricted areas has brought out some of the difficulties of race antagonisms which always develop. The more the white people outside of the South are confronted with problems growing out of an increasing negro population, the more the South's handling of the race question will be appreciated for the fairness with which it has dealt with the negro.

That the South is the greatest friend the negro ever had and that the South has been of far greater value to the negro than the negro to the South will become more in evidence as the negro population increases in other sections. Economically the large negro population of the South has been a handicap. It has kept wages of unskilled labor on a lower scale than in other sections of the country. With the proportion of negro population to white population in the South steadily declining, the South's buying power has advanced as labor costs have increased, for cheap labor is not conducive to general prosperity.

The negro population of the United States as of the Census of 1930 was 11,891,000, as compared with 10,463,000 in 1920. This is a gain of 13.6 per cent, as compared with an increase of 14.8 per cent for the white population of the country, which numbered 108,864,000 in 1930.

The 1930 Census of population by race and color, just released, shows that the migration of negroes from the South which first became pronounced following the World War was to become permanent. After the depression of 1921, the movement rapidly gained momentum as many negroes, unable to find employment in the South, turned to other sections and, while some of them returned to the South following their failure to get jobs elsewhere, the 1930 Census proves that the migration has continued in increasing volume. In fact, for many years the South has been growing steadily whiter, with the number of negroes decreasing in proportion to white population. In 1860 the negroes of the South numbered 4,193,000 and represented over 34 per cent of the total Southern population. There were then less than 250,000 negroes outside of the South. In 1920 the negroes in the South were but 25 per cent of the South's population and in 1930 their proportion had dropped to 22 per cent. More than 2,339,000 negroes are now living outside the South.

As pointed out in the Blue Book of Southern Progress, between 1860 and 1880 the negro population of the South increased by 1,878,000, or 44 per cent. Outside of the South in this 20-year period the negro population increased 260,000, or 104 per cent. In the next 20 years—from 1880 to 1900—the negro population of the South increased by 1,980,000, or 32 per cent, while outside of the South the increase was 272,000, or 53 per cent. Between 1900 and 1920

the negro population increased in the South by 1,006,000, or 12 per cent, compared with an increase in the rest of the country of 622,000, or 79 per cent.

But between 1910 and 1920 the negro population of the South increased by 184,000, or about 2 per cent, while in this ten-year period the negro population outside of the South showed a gain of 451,000, or 47 per cent—nearly two and one-half times the increase in the South by actual numbers. It is between 1920 and 1930 that the migration of the negroes reached greater heights. In 1920 the South had 9,060,000 negroes and by 1930 the Census showed the South to have 9,552,000 negroes, or a gain in this ten-year period of less than 492,000. It is most significant that the gain in the negro population outside the South between 1920 and 1930 was 936,000, or nearly double the actual increase in the negro population of the South during the same period, and more than double the gain made between 1910 and 1920.

The largest increase since 1920 by geographic divisions was reported in the Middle Atlantic States of New York, Pennsylvania and New Jersey, which had a gain of 455,000 negroes, or about equal to the growth in negro population of the entire 16 Southern States. The next largest gain in negro population was in the East North Central States, 415,000. In percentage of gain the Pacific States reported 88 per cent, followed by 80 per cent in the East North Central States, 72 per cent in the Middle Atlantic and 19 per cent in New England. The extent of the migration to states outside the South is further realized when it is seen that in some Southern states the number of negroes in 1930 was less than in 1920. West Virginia reported a 5.8 per cent decrease in negro population in the ten-year period; South Carolina, 8.2 per cent; Georgia, 11.2 per cent, and Kentucky 4.2 per cent. These figures are in decided contrast with the gain in negro population in New York of 108 per cent; New Jer-

States	Total Population 1930	Negro Population		Percentage of increase
		1930	1920	
Alabama	2,646,248	944,834	900,652	4.9
Arkansas	1,854,482	478,463	472,220	1.3
District of Columbia	486,869	132,068	109,966	20.1
Florida	1,468,211	431,828	329,487	31.1
Georgia	2,908,506	1,071,125	1,206,365	-11.2
Kentucky	2,614,589	226,040	235,938	-4.2
Louisiana	2,101,593	776,326	700,257	10.9
Maryland	1,631,526	276,379	244,479	13.0
Mississippi	2,009,821	1,009,718	935,184	8.0
Missouri	3,629,367	223,840	178,241	25.6
North Carolina	3,170,276	918,647	763,407	20.3
Oklahoma	2,396,040	172,198	149,408	15.3
South Carolina	1,738,765	793,681	864,719	-8.2
Tennessee	2,616,556	477,646	451,758	5.7
Texas	5,824,715	854,964	741,694	15.3
Virginia	2,421,851	650,165	690,017	-5.8
West Virginia	1,729,205	114,893	86,345	33.1
South	41,248,620	9,552,815	9,060,137	5.4
Maine	797,423	1,096	1,310	-16.3
New Hampshire	465,293	790	621	27.2
Vermont	359,611	568	572	-0.7
Massachusetts	4,249,614	52,365	45,466	15.2
Rhode Island	687,497	9,913	10,036	-1.2
Connecticut	1,606,903	29,354	21,046	39.5
New England	8,166,341	94,086	79,051	19.0
New York	12,588,066	412,814	198,483	108.0
New Jersey	4,041,334	208,828	117,132	78.3
Pennsylvania	9,631,350	431,257	284,568	51.5
Delaware	238,380	32,602	30,335	7.5
Middle Atlantic	26,499,130	1,085,501	630,518	72.2
Ohio	6,646,697	309,304	186,187	66.1
Indiana	3,238,503	111,982	80,810	38.6
Illinois	7,630,654	328,972	182,274	80.5
Michigan	4,842,325	169,453	60,082	182.0
Wisconsin	2,939,006	10,739	5,201	106.5
East N. Central	25,297,185	930,450	514,554	80.8
Minnesota	2,563,953	9,445	8,809	7.2
Iowa	2,470,939	17,380	19,005	-8.6
North Dakota	680,845	377	467	-19.3
South Dakota	692,849	646	832	-22.4
Nebraska	1,377,963	13,752	13,242	3.9
Kansas	1,880,999	66,344	57,925	14.5
West N. Central	9,667,548	107,944	100,280	7.6
Montana	537,606	1,256	1,658	-24.2
Idaho	445,032	668	920	-27.4
Wyoming	225,565	1,250	1,375	-9.1
Colorado	1,033,791	11,828	11,318	4.5
New Mexico	423,317	2,850	5,733	-50.3
Arizona	433,573	10,749	8,005	34.3
Utah	507,847	1,108	1,446	23.4
Nevada	91,058	516	346	49.1
Mountain	3,701,789	30,225	30,801	-1.9
Washington	1,563,396	6,840	6,883	-0.6
Oregon	953,786	2,234	2,144	4.2
California	5,677,251	81,048	38,763	109.1
Pacific	8,194,433	90,122	47,790	88.6
United States	122,775,046	11,891,143	10,463,131	13.6

- Decrease.

sey, 78 per cent; Pennsylvania, 51 per cent; Ohio, 66 per cent; Illinois, 80 per cent; Michigan, 182, Wisconsin, 106, and California, 109 per cent.

One angle of the negro migration to Northern industrial centers concerns the extent to which they have taken the place of certain classes of foreign immigration, restricted because of the lower quotas allowed by law. In the main the negroes from the South make better citizens than the foreign element they supplant and are more amenable to our laws and customs. Not only has this negro migration to other sections been growing, but within the South there has been a shift of negro population from the farms and rural districts to the towns and cities where they have sought employment in industrial lines.

The rapid growth of negro population

in some of the larger cities of the country has already caused grave concern as to how best to handle the race problems which have arisen. Whether such a migration will be of value to the negro race as a whole is a question the future must answer.

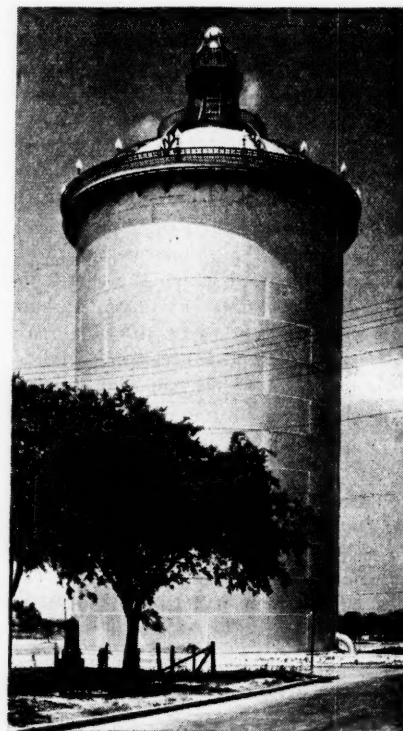
Steel for Hopper Cars

Roanoke, Va.—The Norfolk & Western Railway Company contracted with the Carnegie Steel Co., Pittsburgh, Pa., for 1700 tons of plates, shapes and bars for 450 hopper cars to be built in the railway shops here. The railroad also ordered 500 tons of steel for parts from the American Car & Foundry Co., New York, and 200 tons of shapes from the Virginia Bridge & Iron Co., Roanoke.

San Antonio's Ornamental Standpipe

An ornamental steel standpipe was completed recently for the City Water Board, San Antonio, Texas, by the Chicago Bridge & Iron Works, Chicago, Ill. It is 65 feet in diameter and 100 feet high, surmounted by an ornamental tower on which is mounted a steel ball 5 feet in diameter, covered with goldleaf. A balcony railing and ornamental electric light fixtures are also features of the design.

The new standpipe was installed primarily as a pressure equalizer for hilly sections in the southeastern part of San Antonio. During the summer there is a heavy demand for sprinkling purposes in this area, which imposes a severe



This 100-Foot Tank Serves as a Pressure Equalizer

burden on water mains leading to the higher section of the city. The standpipe is filled to capacity during the light load periods and feeds back into the mains during the heavy load periods, making it possible to maintain a more uniform pressure.

The city water plant is estimated to have a capacity of about 23,000,000 gallons daily, the supply being obtained from 28 artesian wells. No reservoirs are included in the system. In order to equalize pressure there is a 1,000,000-gallon elevated steel tank to serve the north side of the city, and the recently completed 2,500,000-gallon standpipe serves the southeastern section.

Twin Launching

at Newport News

ON August 15 two fine vessels for the American merchant marine will be launched almost simultaneously at the plant of the Newport News Shipbuilding & Dry Dock Co. The vessels will be named "Talamanca" and "Segovia" and are the first of three sister ships being built at Newport News, Va., for the United Mail Steamship Company, a subsidiary of the United Fruit Company.

The launching receives additional prominence through the fact that Mrs. Herbert Hoover will be sponsor for the two vessels. In the presence of what is expected to be a notable gathering, including diplomatic representatives from Central American countries with which the vessels will trade when they go into service, Mrs. Hoover will christen the new ships with water collected from various rivers in Central America. The names of the vessels were selected by Victor M. Cutter, president of the United Fruit Company, and have historical interest.

The twin launching will mark a forward step in the determination of Congress to build up an American marine that will make it possible not only to carry American-made goods in American bottoms, but in the event of war will materially add to the strength of the American fleet. Construction has been made possible by the Jones-White marine act, passed in 1928, designed to

overcome the differential between American-built ships and ships built in foreign yards.

The dimensions are 447 feet over all, 430 feet on the load waterline, 60 feet beam and 34 feet 9 inches from keel to upper deck. Displacement at 24 feet draft will be in the neighborhood of 11,000 tons. At normal service draft it is expected the new ships will maintain a speed of 18 knots with a maximum of 20 knots. They will have a fuel oil capacity of 1400 tons and will carry 600 tons of fresh water.

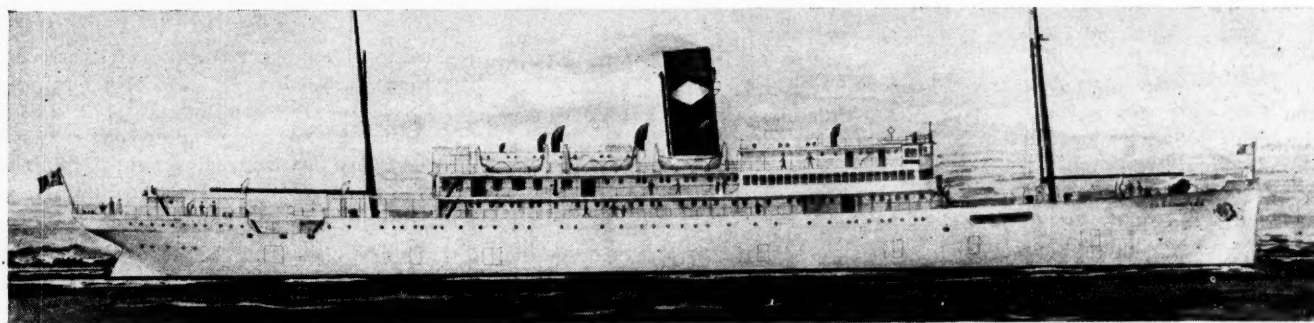
As examples of marine architecture the new ships embody all that is latest in seagoing safety and in luxurious comfort. Two special features are a glass-enclosed promenade forward on the promenade deck and a permanent outdoor swimming pool on the main deck just aft the superstructure. The public rooms comprise a library, writing room, entresol, lounge, smoking room and a deck ballroom with 770 feet of dance space, all on the promenade deck. Dining room, with accommodations for about 110 persons will be located forward on the upper deck, and there is a spacious entrance lobby on the bridge deck. Decorations, appointments and furniture will be in modern Spanish.

In accord with the motto of the Great White Fleet, "Every passenger a guest," passenger accommodations are all first-

class. The rooms are carried on the upper bridge and promenade decks with beds for about 120 persons. There are four suites with sitting room, twin bedroom and private bath, 12 twin bedrooms with private or connecting bath, nine single rooms with private shower, and regular staterooms with one and two beds. All rooms are outside rooms, a necessity in the tropics and arrangements have been perfected automatically to cool the rooms when necessity arises. There is ample closet room and plenty of stowage space for tourists' equipment and baggage.

The ships are big refrigerating plants made necessary by the business of fruit carrying. All cargo space is completely insulated and a large refrigerating plant aft the engine room is maintained in a separate compartment in order to provide necessary brine circulation through the air coolers which are fitted in 11 of the 14 fruit-carrying compartments. Motor-driven fans insure a constant supply of fresh air throughout the ship. Specifications call for a cold air plant capable of efficient refrigeration of the banana cargo and it will be possible to reduce a full cargo of fruit to the required temperature in approximately 24 hours under tropical conditions.

Every safety device known to modern marine architects will be installed. There will be eight watertight bulk-



One of the United Mail Steamship Company Vessels Under Construction at Newport News, Va.

heads all extending to or above the main deck. Bulkheads divide the vessel into nine water-tight compartments, insuring safety of the vessel even with two compartments flooded. Other features of structural importance are a duct keel extending from the boiler room to No. 1 hold, and the fitting of the main fuel tanks clear of the outer shell and of the cargo holds, thus preventing oil leaks through the hull or into the cargo space.

Safety of passengers and crew is further assured by radio telegraphic instruments, radio direction finders, fathometer, fire extinguishing systems in engine and boiler spaces and a thermostat alarm system throughout passenger and crew quarters. There is also a smoke detector system, indicating in the wheel house throughout all cargo spaces.

A system of mechanical ventilation throughout the ship of the noiseless diffusing type (no draft) is capable of changing the air ten times an hour and involves 18 supply systems and five exhaust systems.

Propulsive machinery of the vessels is in line with the efficiency in hull construction. It is turbo-electric with two propulsion motors and two main turbo-generators, one for each of the twin shafts. There are four oil burning, water tube boilers. The turbines, generators and motors will develop 10,500 horsepower. Boilers have a working pressure of 350 pounds and are fitted with super-heaters for about 230 degrees superheat.

In addition to main engines the engine room auxiliaries are electrically driven as well as the refrigerating machinery, ventilation fans, winches, capstan and windlass. The steering gear is hydro-electric; and as a final development, ranges and standing cooking device are all electrically equipped.

The Talamanca and Segovia will go into commission in December of this year.

Gasoline Pipe Line Extension

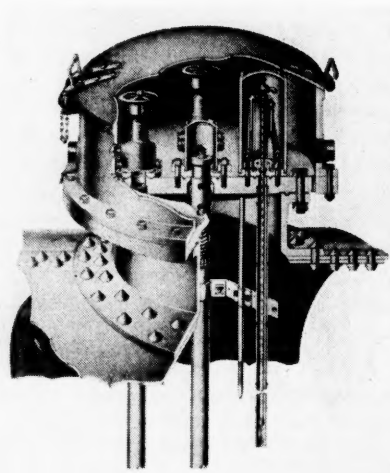
Kansas City, Mo.—The Great Lakes Pipe Line Co., with offices at the Fairfax Airport here, has awarded three contracts to build 120 miles of pipe line from Osceola, Ia., to Omaha, Neb. A 4- and 6-inch pipe contract was awarded to the Truman-Smith Construction Co., El Dorado, Kans., while a pumping station near Corning, Ia., will be constructed by John Whitehurst, Ponca City, Okla., and a terminal building at Omaha by the Permanent Construction Co., Chicago. This section is an extension of a 1250-mile gasoline line recently constructed by the Great Lakes company from Oklahoma to the Great Lakes.

Insulated Tank Car for Liquefied Butane

Insulated tank cars of a new type, designed for transportation of liquefied butane, were delivered recently to the Empire Oil & Refining Company of Bartlesville, Okla., by the General American Tank Car Corporation, Chicago. The accompanying view shows a 10,000-gallon Class 104-A car, one of the fleet, built with double-riveted tank and tested and found tight at 100 pounds per square inch; it is provided with special manway with loading valve, unloading valve, safety valve, gauging device, sampling tube and thermometer well.

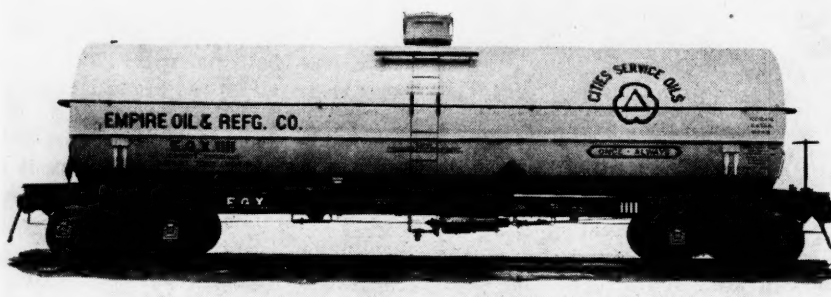
The tank is insulated with four inches of cork and covered with a welded-steel protective jacket, the whole mounted on a heavy type-30 underframe, embodying the latest features designed for reduction of upkeep and repair. Equipment includes steam coils for heating the contents, as the tank carries the butane under pressure to prevent its expansion into vapor or gas; the car, therefore, has no dome or bottom connections for unloading.

Butane shipped in cars of this type is derived from natural gas by fractionation, and will be used for industrial heating, as in forging operations at the Chrysler automobile plant, or in the an-



View of Manway Containing Loading, Unloading and Safety Valves, Thermometer Well, Gauging Device and Sampling Tube

nealing of castings by General Motors, or in heat-treating operations by the A. O. Smith Corporation at Milwaukee, or for anyone of a number of other industrial heating processes requiring a particularly clean fuel of constant thermal value.



Tank Car With Capacity of 10,000 Gallons

\$1,000,000 Hospital Improvements

Oklahoma City, Okla.—Carrying out a \$1,000,000 program for additions and improvements to various state hospitals, the State Board of Public Affairs, Oklahoma City, has awarded the following contracts: Ward building at the State Tuberculosis Sanatorium at Clinton, Tankersley Construction Co., Oklahoma City, general contractor; ward building for Eastern State Tuberculosis Sana-

torium, Talihina, Bailey-Burns Construction Co., Norman, Okla., contractor; addition to Hope Hall of Central State Hospital, Norman, Bailey-Burns Construction Co., contractor; ward building and power house for Western State Hospital for Insane, Supply, Dunning Construction Co., Oklahoma City, contractor, and ward building for the Eastern Oklahoma Hospital for the Insane, Vinita, Manhattan Construction Co., Muskogee, Okla., contractor. Layton, Hicks & Forsyth, Oklahoma City, are the architects.

Large and Modern Plant Operated by a

Georgia Granite Company

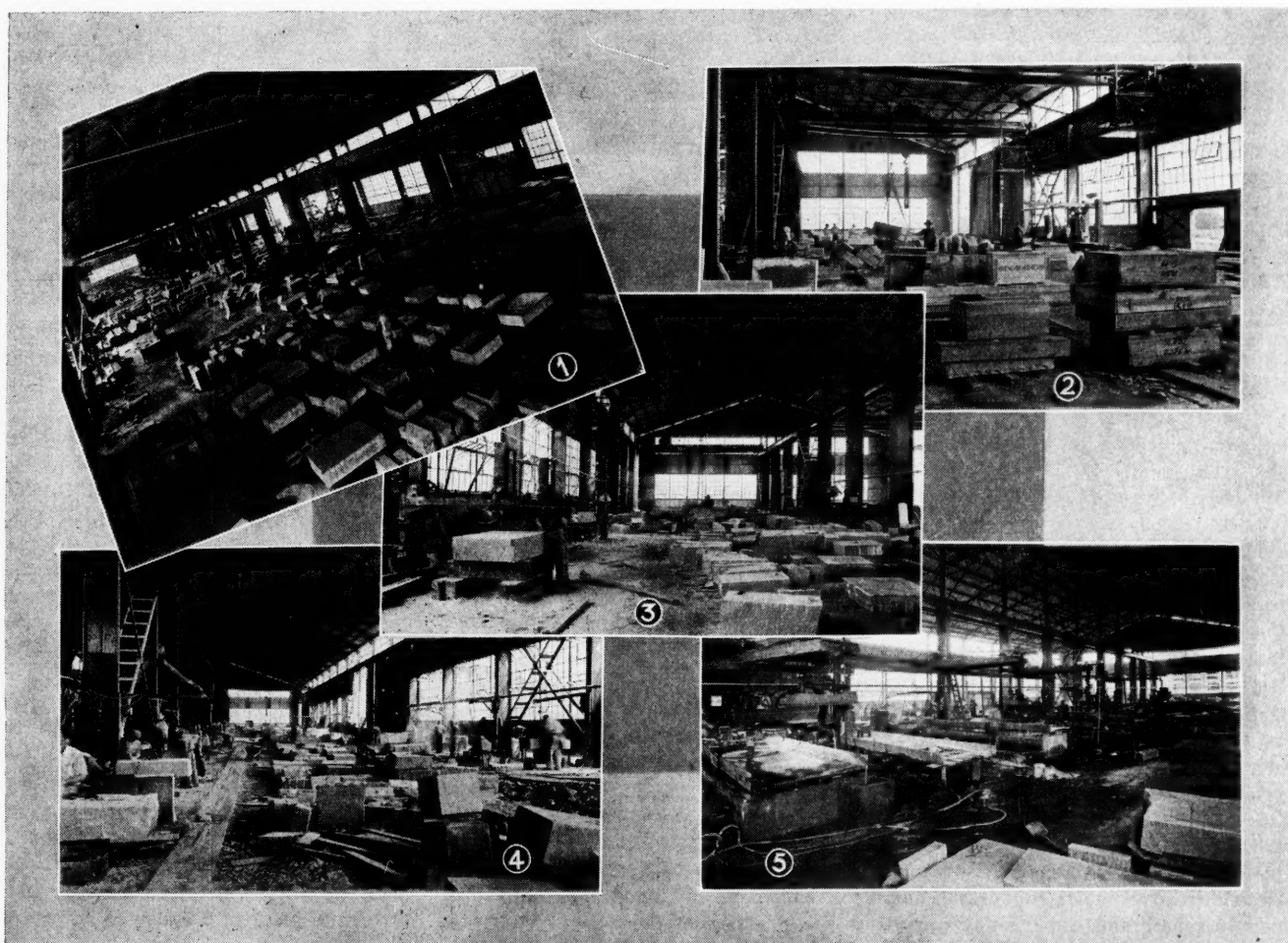
Full time operations are reported by the Wholesale Granite Company of Atlanta, operating a quarry in Madison County, Georgia, and turning out Berkeley Blue granite for monumental purposes. The present company represents a reorganization effected in 1930. Main plant buildings were completed in the spring of this year, including steel structures with roofs and sides of corrugated iron. An abundance of light is provided through steel casement windows. The modern machinery installed includes seven polishing machines, electrically

driven. There are five surfacing machines, two gang saws and two sand blast machines. The new building is 100 by 410 feet and was built by the Converse Bridge & Steel Co., Chattanooga. Four P. & H. cranes are used for handling material. Polishing machines were supplied by the Patch-Wegner Co., Rutland, Vt.; the Lincoln Iron Works, Rutland, and Smith-Whitcombe-Cook Co., Barre, Vt. Surfacing machines were supplied by the Dallett Co., Philadelphia.

In order to insure monuments of beauty and of materials that will endure,

the producers say that every precaution is taken to see that granite shipped from the quarry is selected stock and free from flaws. At the finishing plant it is again rigidly inspected. Berkeley Blue granite is described as a fine grain granite of low moisture absorption, less affected by severe climatic conditions than some other granites. It has a crushing strength per square inch in excess of 19,500 pounds.

Officers of the company include: B. F. Coggin, president; J. A. Logan, vice-president; W. H. Allen, vice-president and treasurer.



1—Plant Interior, With Lettering Department in Foreground. 2—Boxing and Shipping Department. 3—Surfacing Department and Carborundum Machine. 4—Section of Cutting Department. 5—Polishing Department

Anniston Combines

Industry and Culture

MOST interesting of the features of Anniston, Ala., is not the great group of mighty industrial plants, on the one hand, or the beautiful residences and churches and schools, on the other, but a merging of business activity and culture unusual in city life. Residents appear puzzled whether to show the visitor first the great plant of the Swann Chemical Company and the local works of the Alabama Pipe and Foundry Company, for instance, or the wonderful Regar Museum of Natural History, the historic Church of St. Michael and All Angels and such homes as that of former Governor Thomas E. Kilby.

So it is that in a slight respite from high-pressure industrial activity, the people of Anniston have found occupation and intellectual profit in developing the city, in expansion of the schools and in enjoyment of the comprehensive library and the many recreational facilities.

"All these fine roads lead into Anniston—none leads out," Charles F. Varn, secretary and manager of the Anniston United Chambers of Commerce, smilingly explains, in speaking of the numerous hard-surface highways, and thus Anniston becomes the center of a populous and prosperous area. Many residents of Georgia, only 30 miles away, make Anniston their Mecca, and many persons in Tennessee frequently travel the 95-mile stretch from that state into this Alabama city.

Although the normal annual payroll of nearly \$15,000,000 has not been maintained at this peak in recent months, the city has not found it necessary to appropriate special millions of dollars for public works, for relief of unemployed industrial workers. In general, the great plants have taken care of their forces through readjustments in working hours and in repair and construction and expansion tasks.

In further preparation for greater business in the future, more than one

By
GEORGE GARNER

concern has acquired additional land on which to erect plant reinforcements. The Swann company is understood to contemplate the erection of at least one new large building on property adjacent to its present structures, and other companies are said to have increased their land holdings, in anticipation of progressive expansion as business conditions improve.

With approximately 125 manufacturing enterprises, of which more than half a hundred are major industries, Anniston manages to keep at least reasonably busy. Diversity of products is a strong factor in the situation. The textile mills provide employment for many hundreds, and others of the 15,000 workers are divided among plants turning out cast iron pipe, aluminum articles, steel castings, industrial cars, brasswork, paper boxes, lumber and woodworking products, automobile bodies and tops, paints, abrasives, fertilizer, chemicals and many other varieties of output.

"Our industries are trying to take care of their workers," says Mr. Varn, "and our workers pretty generally are able to take care of themselves. More than this, we have a reservoir of fine, American labor on which to draw as the future may demand. We do not need and do not want alien workers. Our people are happy, and enjoy full freedom to work for whom they wish, at wages they find satisfactory, and under splendid conditions. This contentedness of our workers is one of our greatest industrial assets."

Satisfaction also is expressed in the

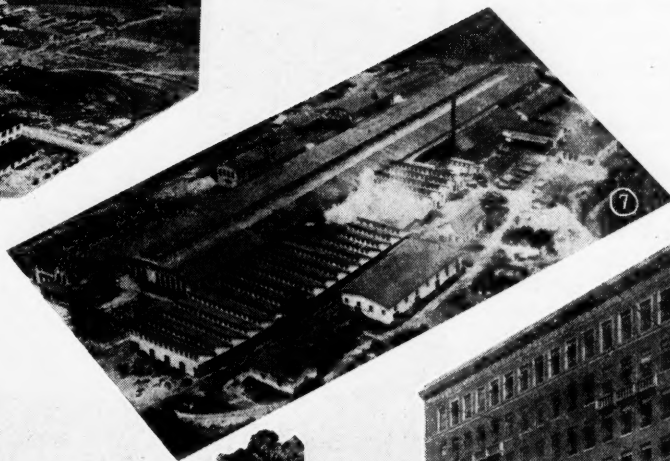
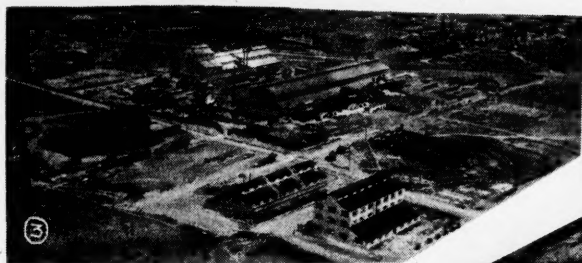
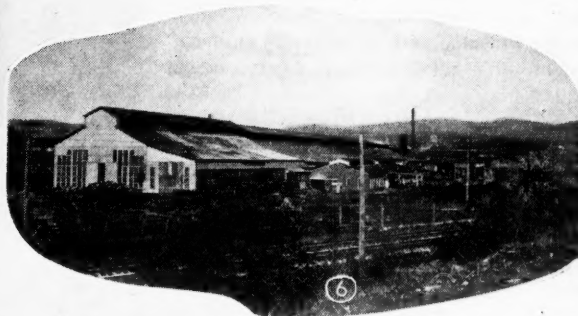
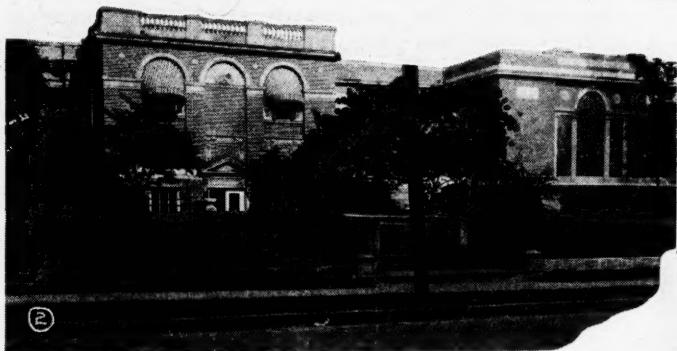
city on the addition of natural gas to the other varieties of fuel and power for use in the factories and the homes. Electricity is brought in over a stretch of the Alabama Power Company system which includes a tie-in with Lock 12 of the Mitchell dam and with a line from the Gorgas steam plant, and a connection with the Martin dam hydro-electric plant. The coal supply comes from the Birmingham fields and from mines in Tennessee. In laying its main pipeline eastward from the Monroe field of Louisiana, the Southern Natural Gas Corporation, with headquarters at Birmingham, placed Anniston on the main route. The main line from Birmingham to Anniston is of 22-inch size and from Anniston to Atlanta 20 inches, while the feeder and branch lines run from 3½ to 20 inches.

The tie-up between the industrial activities and the intellectual interests of the city is indicated in the fact that the acquisition of the Regar Museum of Natural History was a direct result of the removal of H. K. Regar & Sons, Inc., seamless hosiery, from Pennsylvania to Anniston. Impressed by the value of the city library and the success of the local Little Theater organization, which had won a prize in competition with companies from New York, Philadelphia, Baltimore and Cincinnati, Severn Regar purchased the celebrated Werner natural history collection, in the North, and presented it to Anniston. The city erected a beautiful annex to the library for the museum, and the collection each year draws a large number of scientists and other visitors from all parts of the country.

Many visitors also are attracted to St. Michael and All Angels Episcopal Church, erected in the past century by John W. Noble and accounted a particularly fine piece of English architecture.

A magnet for industrial leaders and industrial chemists is the experimental plant of the United States Bureau of

In Anniston Where Beauty and Business Merge



1—Plant of American Net & Twine Co. 2—Anniston Carnegie Library and Regar Museum. 3—Swann Chemical Co. plant. 4—Residence of Charles A. Hamilton. 5—St. Michaels & All Angels Episcopal Church. 6—Kilby Car & Foundry Co. 7—Soil pipe and fittings plant of Union Foundry Co. 8—Liles Building, an office structure.

Standards, operated with active participation by the Swann organization's Federal Phosphorous Company, the University of Alabama and the Alabama Polytechnic Institute. This plant is reputed to be the pioneer in the commercial manufacture of xylose, a carbon sugar made from cottonseed bran.

Camp McClellan, in the Fourth Corps area, with about 20,000 acres, is about five miles from the city.

In its nice balance between industry and culture, Anniston shows a remarkable trade record. Engaged in retail business are nearly 300 stores, which handle a volume of \$9,750,000 a year. Merchandise in stock hovers around \$1,500,000. At the head of the list are automotive establishments, doing a business over \$2,400,000. More than \$1,500,000 a year is recorded in general merchandise stores, and more than \$700,000 is spent each year on clothing. Furniture stores handle \$460,000 of business, and lumber and building retail trade is figured over \$735,000.

"The zone circle of Anniston is elastic," says Mr. Varn, "and takes in more than the city proper. Really within the city, though technically beyond the limits, are about 2500 people. Blue Mountain virtually contributes 1200 more to our population, and Oxford, as a whole, nearly 3000. Then, too, there are Hobson City, Fort McClellan and other towns."

From which it may seem that the 5300 dwellings in the city are only part of the real residential Anniston area.

Farm By-Products Research

Paul Burke Jacobs, chemical engineer of the Bureau of Chemistry and Soils, has been appointed to direct factory-scale experiments in utilization of farm by-products to be inaugurated next month at Ames, Iowa, by the U. S. Department of Agriculture, in cooperation with Iowa State College, according to Dr. W. W. Skinner, assistant chief of the chemical and technological research unit of the Bureau of Chemistry and Soils.

Water Company Expanding

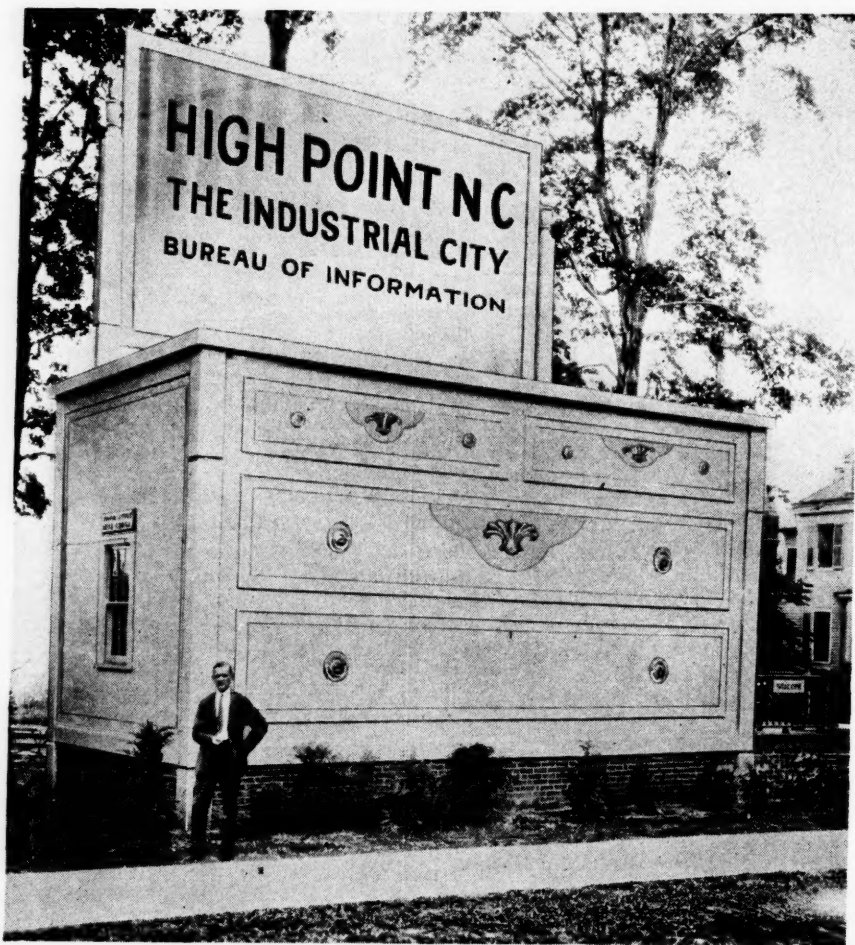
Cambridge, Md. — The Dorchester Water Co., subsidiary of the Pennsylvania State Water Corporation, New York, which in turn is controlled by the Community Water Service Company, also of New York, has begun the expansion of its plant by the installation of two automatic turbine-type pumps having a combined capacity of 2,304,000 gallons daily.

World's Largest Bureau

The largest bureau in the world appropriately houses the activities of a commercial organization in High Point, N. C., a city that is noted far and wide as a furniture manufacturing center of the South.

When the Chamber of Commerce realized the necessity for a conveniently located information booth to serve tourists, the idea was developed of a building designed in the shape of a piece of furniture. Decision was in favor of a bureau, since this not only represented the city's thriving furniture industry, but was

truly a "Bureau." The structure was erected in near proximity to the business center of the city on one of its main thoroughfares; two national highways pass it. It was built through popular subscription of materials by local firms and out of town firms with local branches. The interior is paneled in mahogany, walnut and rosewood, making a very attractive room. From the front elevation the structure appears as a giant bureau, but side doors and windows are provided. The bureau is 27 feet wide, 14 feet deep and 32 feet high.



This Unique Structure, 32 Feet in Height, Serves as an Information Booth

Levee and Channel Bids

Moore Haven, Fla.—Bids will be opened September 15 in the office of the U. S. Engineer, Jacksonville, for constructing approximately 35,000 linear feet of levee and navigation channel, involving the removal from the channel

and placing in the levee about 2,179,000 cubic yards of material, dragline section, or 3,064,000 cubic yards, hydraulic section, including drainage structures. The work is between Disston Island drainage district pumphouse No. 1, near Moore Haven, and Clewiston, extending toward the latter as far as available funds will permit.

Constructing Baltimore

Post Office

Stone work is now complete on the \$3,000,000 post office under way in Baltimore and the building is expected to be finally completed within eight months.

With exception of difficulties encountered in the foundation work, construction has gone ahead without interruption. To place the foundation it was necessary to excavate through the original Jones Falls Creek bottom. During construction of the original post office on the site, this creek bottom was filled in and wooden piles were driven. These piles were removed and footings for the new building extended through the fill to the original creek bottom.

Concrete for construction of the building was mixed in a central plant, located at the approximate center of the building, and distributed through skylight shafts. Aggregate was delivered to concrete batching hoppers by trucks and concrete buggies were used for distribution from central floor receiving hoppers. Brick and stone were carried on platform elevators, distributed on the various floor levels by warehouse trucks and set in place by breast derricks. The heavy cornice stone was lifted by a stiff-leg derrick and distributed to setting locations by stone

carts. One three-drum hoist lifted all stone for the entire structure, and two electric, single-drum hoists were used for hoisting masonry and interior partitions.

The placing of interior marble is now well under way on the first and second floors and lathing is about complete. Tile roofing is being installed and interior partitions are nearing completion. Elevators are in working order and complete with exception of finished cabs and doors. Into the structure went approximately 600 tons of reinforcing steel, 1080 tons of granite, 5600 tons of limestone, 65 tons of exterior marble, 3675 tons of structural steel, 24,000 cubic yards of concrete and 200 tons of metal forms.

The building is six stories high, 238 by 238 feet, with basement and sub-basement. The exterior, designed in a modified classical style, is faced with granite to the first floor and with limestone above; interior courts will be faced with light colored brick and stone trimmings. The building will be fire-proof throughout. The post office will occupy the first and second floors and the basement, the first story to contain main public lobby, with money order division, registry division, boxes, general

delivery, stamp division, cashier, c. o. d. and customs, superintendent of mails and a large work room.

Main entrance to the lobby will be from Calvert street, with an additional entrance from Fayette street. Four passenger elevators will be located in the lobby at the sides of the main entrance, with a main stairway to second floor and the basement. On the second floor will be the postmaster's suite, assistant postmaster, cashier, clerical divisions, inspectors, medical unit, examination, roundsmen, supplies and records and a work room. Basement will contain the parcel post division with public lobby, public entrance from Lexington street, mailing platform, driveway within the building, printing office, special delivery messengers, supplies and so on.

The third floor is assigned to the Third Army Corps. The fifth floor will contain three court rooms with their customary suites of offices for judges, attorneys, marshals, clerk of court and U. S. Commissioner. The fourth and sixth floors will provide for other Federal officials located in Baltimore. The post office floors are served by four freight elevators, special mail chutes and mechanical conveyors. A tunnel under Calvert street will extend to the Federal Reserve Bank at the northwest corner of Calvert and Lexington streets. Stairways and elevators are located at the Fayette and Lexington street entrances. Heating plant, fuel storage and supply rooms are in the sub-basement.

Construction is being carried out by N. P. Severin Co., general contractor, Chicago, from plans by the Supervising Architect of the Treasury Department, Washington.

Progress on Intracoastal Canal

Galveston, Tex.—Having been awarded the contract for dredging the Galveston-Port Arthur section of the Intracoastal Canal, the Standard Dredging Co. placed men at work, during July, constructing levees in the vicinity of Port Arthur and dredging operations are to start at a very early date. The dredge will work westward through Jefferson and Chambers counties for a distance of 30 miles, to a point near the Galveston County line. The channel is to be 9 feet deep and 100 feet wide, requiring the removal from this section of 8,000,000 cubic yards of material.

Deeds covering the 28½ miles of right of way in the eastern part of Galveston County are now being examined by the Chief of Army Engineers in Washington and, when approved, bids will be asked for dredging this portion.



Photo by Schindéle, Baltimore.

New \$3,000,000 Post Office for Baltimore

Commercial Cotton Crop

THE commercial cotton crop of the United States for the year¹ ending July 31, 1931, amounted to 13,893,155 bales, showing a decrease under 1929-30 of 620,517, under 1928-29 of 1,892,201 and under 1927-28 of 550,779 bales.

The decrease compared with last year was almost entirely in the "other Gulf States," the Atlantic States showing a material gain while Texas varied but slightly.

The figures in round numbers are: Texas over last year 49,000 bales; other Gulf States, 1,449,000 under last year; Atlantic States, over last year 779,000 bales.

These figures refer to the commercial crop, or amount marketed, and not to growth. In other words, the growth was 14,732,000 bales; whereas the commercial crop was 13,893,000 bales, or 839,000 less.

The crop was better than the year before, averaging Middling in grade and of better staple.

The season has been one of uncertainty and dissatisfaction. The highest level of values was in August and the lowest in June, with intermediate variations, ending with an average drop for the year, based on the ten markets, of 7.67 cents a pound, or, say, in excess of \$38 a bale under last year's average. In this country, the mills bought and consumed less, their purchases being for the most part from hand to mouth and the demand from abroad was but little different from the circumscribed limits of last year. The result is that we are left with a carry-over of lint cotton unequalled in amount at the close of any year past, except in 1921.

The comparative carry-over aggregates of lint cotton in this country and abroad

Excerpts of Annual Report of Secretary Henry G. Hester of the New Orleans Cotton Exchange, Covering the Cotton Crop of the United States for 1930-31.

for the past three years and in 1921 are shown in an accompanying table.

Cotton Carry-Over, Bales	1930-31	1929-30	1927-28	1920-21
In United States.....	6,126,000	4,055,000	2,012,000	6,374,000
In Foreign countries.....	2,584,000	1,884,000	2,383,000	2,325,000
Totals	8,710,000	5,939,000	4,395,000	8,699,000

It was in 1921 that the value of the crop dropped for the first time in five years below the billion dollar mark; but that did not spell an approximation to calamity like the total of the past year, during which we marketed 13,893,000 bales for \$693,000,000, a decrease under the 1929-30 value of over \$500,000,000. And these figures do not include the seed, the value of which was about \$50,000,000 less than last year.

The one bright spot has been in our sales to the Orient. Japan, China and India appreciate the value of our low priced cotton and have increased their takings by more than a half million bales. In face of the worldwide depression, month by month there has been a steady stream of our cotton to Japan and the same has been the case with China though on a smaller scale.

Of the exports, which in round numbers amounted to 6,927,000 bales (an in-

crease of 75,000) Germany again led with 1,699,000, a reduction from last year of 98,000. We sent to Great Britain 1,090,000 bales, which was under last year by 180,000. France took 938,000, which total was ahead of last year by 111,000; to Italy we exported 488,000, which indicated a drop of 185,000. Our exports to the Orient were 1,783,000, a gain over last year of 536,000. We exported only 29,779 bales to Russia as compared with 128,721 the year before.

The average value of Middling based on the ten markets was 9.57 cents, com-

paring with 17.24 last year, 18.92 year before last and 19.12 in 1927-28.

The average commercial value per bale of lint cotton was \$49.86 against \$88.10 last year, \$96.92 year before last and \$104.29 in 1927-28.

TOTAL VALUE OF THE CROP

	Bales	Values
1930-31	13,893,155	\$ 692,749,255
1929-30	14,513,672	1,211,217,737
1928-29	15,785,356	1,447,632,705
1927-28	14,443,934	1,440,514,259
1926-27	19,205,929	1,230,512,867
1925-26	15,614,707	1,550,811,562
1924-25	14,698,356	1,739,593,374

These values which embrace the commercial crop (of lint and linters) only, do not include the value of the seed.

Thus the value of the crop for the past year as stated was \$692,749,255; if the value of the seed be added we should have a total of \$850,324,855. Last year, the total including seed was \$1,422,224,737 and the year before it was \$1,723,120,795.

CARRY-OVER JULY 31, BALES

	1931	1930	1929
Southern mills	763,000	809,000	747,000
Counted interior towns.....	1,001,000	719,000	250,000
Uncounted towns and plantations.....	1,497,000	977,000	320,000
Total held in cotton belt.....	3,261,000	2,505,000	1,317,000
U. S. ports.....	2,782,000	1,548,000	535,000
Northern mill stocks.....	362,000	334,000	360,000
European mill stocks.....	630,000	620,000	770,000
European port stocks.....	1,204,000	821,000	1,008,000
Stocks in interior and in transit outside of the cotton belt	141,000	73,000	84,000
Japanese port and mill stocks and afloat.....	426,000	318,000	444,000
Other foreign port and mill stocks and afloat....	8,806,000	6,219,000	4,518,000
Total carry-over	9,130,000	6,344,000	4,679,000
Linters carried over.....	420,000	405,000	284,000
Lint cotton carried over.....	8,710,000	5,939,000	4,395,000

COMMERCIAL CROP BY STATES, BALES

	1930-31	1929-30	1928-29
Alabama ...	1,426,000	1,215,000	1,169,000
Arkansas ..	860,000	1,889,000	1,336,000
Florida	53,000	30,000	23,000
Georgia	1,531,000	1,254,000	1,185,000
Louisiana ..	699,000	772,000	727,000
Oklahoma ..	863,000	1,141,000	1,309,000
Mississippi .	1,410,000	1,812,000	1,606,000
N. Carolina, etc.*	874,000	831,000	999,000
S. Carolina. 1,025,000		800,000	819,000
Tennessee, etc.†	1,090,000	1,257,000	1,089,000
Texas	4,062,000	4,013,000	5,523,000
Total crops.....	13,893,000	14,514,000	15,785,000

* Includes Virginia and Kentucky. † Includes Missouri, California, Arizona, New Mexico, etc.

Cotton Consumption in the South

The decrease of 630,000 bales of lint cotton consumed in the South for the year ended the close of July, 1930, has been followed by a further drop during the past year of 617,000, a total of 1,247,000 bales for the two seasons. Naturally this is largely due to the world-wide depression.

Unstable prices for raw material and unsatisfactory markets for goods, minimizing if not altogether barring profits, are the crux of the situation which does not mean, however, that efforts for improved world conditions may not result for the better. With all this, there is an underlying feeling in many quarters that the worst has been seen and that any change is more than likely to be in the way of improvement.

CONSUMPTION, 1931 AND 1930

Bales	Lint cotton	Linters	Total
This year...	4,039,000	280,000	4,319,000
Last year...	4,656,000	295,000	4,951,000
Decrease this year	617,000	15,000	632,000

SOUTHERN MILL TAKINGS AND CONSUMPTION AMERICAN COTTON

(Including Linters)	Year Ending July 31	
	1931	1930
Stocks at beginning year	809,000	747,000
Takings for year	4,273,000	5,013,000
	5,082,000	5,760,000
Consumption	4,319,000	4,951,000
Stocks close year....	763,000	809,000

NORTHERN MILL TAKINGS AND CONSUMPTION AMERICAN COTTON

(Including Linters)	Year Ending July 31	
	1931	1930
Stocks beginning year	334,000	360,000
Takings year	*1,465,000	1,713,000
	1,799,000	2,073,000
Consumption year ...	*1,437,000	1,739,000
Stocks close year	362,000	334,000

*Exclusive of foreign and inclusive of California.

THE COURSE OF CONSUMPTION IN THE SOUTH SINCE 1909-10

	Bales	Bales	Bales
	Consumption	Increase	Decrease
1909-10	2,397,289	.....	110,151
1910-11	2,351,660	.....	45,629
1911-12	2,676,433	324,773	.....
1912-13	2,955,244	278,811	.....
1913-14	3,063,286	108,042	.....
1914-15	3,163,388	100,102	.....
1915-16	4,046,535	883,167	.....
1916-17	4,357,685	311,130	.....
1917-18	4,303,743	.....	53,942
1918-19	3,533,777	.....	769,966
1919-20	3,691,005	157,228	.....
1920-21	3,066,504	.....	594,501
1921-22	3,942,416	845,912	.....
1922-23	4,487,535	545,119	.....
1923-24	3,985,328	.....	502,207
1924-25	4,380,118	394,790	.....
1925-26	4,778,926	398,808	.....
1926-27	5,471,391	692,465	.....
1927-28	5,316,168	.....	155,223
1928-29	5,623,265	307,097	.....
1929-30	4,950,854	.....	672,411
1930-31	4,319,374	.....	631,480

SOUTHERN CONSUMPTION OF AMERICAN COTTON
(Year Ending July 31)

States	No. Mills*	Looms†	Spindles‡	Bales	
				1931	1930
Alabama	95	34,835	1,826,962	524,474	590,367
Arkansas	4	603	28,642	14,728	23,060
Georgia	157	53,461	3,089,495	918,749	1,111,223
Kentucky	5	1,512	82,876	21,653	33,211
Louisiana	2	1,329	50,000	25,155	33,417
Mississippi	12	3,465	128,804	35,696	38,623
Missouri .....	.....	.....	.....	24,008	23,029
North Carolina	391	80,822	5,921,172	1,211,385	1,370,369
South Carolina	198	117,577	5,516,715	1,018,102	1,118,339
Tennessee	26	8,395	578,890	239,169	258,285
Texas	27	5,622	270,752	88,810	124,901
Oklahoma	2	558	30,912	21,293	16,028
Virginia, etc.	8	18,252	651,308	176,152	210,002
Totals	927	326,431	†18,176,528	4,319,374	4,950,854
Less consumed and taken from Southern seaports and included in port receipts.....				319,805	435,195
Net consumption to be added to crop.....				3,999,569	4,515,659

*Mills in operation only. †Employed in mills in operation. ‡Spindles working American cotton only.

CONSUMPTION OF SOUTHERN MILLS IN POUNDS OF LINT COTTON

States	Pounds (Lint)		Average This year per bale	Weights* Last year per bale
	This Year	Last year		
Alabama	256,217,541	289,023,668	488.52	489.57
Arkansas	7,139,252	11,663,806	484.74	505.80
Georgia	445,833,727	541,292,307	485.26	487.11
Kentucky	11,390,921	17,035,192	526.07	512.93
Louisiana	12,336,598	16,520,162	490.42	494.36
Mississippi	17,095,501	18,822,639	478.92	487.34
Missouri	12,907,970	11,846,980	537.65	514.44
North Carolina	579,465,285	643,857,922	478.35	469.84
South Carolina	488,408,001	544,457,567	479.72	486.84
Tennessee, etc.	123,249,176	133,372,429	515.32	516.37
Texas	44,168,948	60,245,736	497.34	482.35
Oklahoma	11,203,411	8,187,085	526.15	510.80
Virginia, etc.	93,824,245	112,130,169	532.63	533.95
Total†	2,103,240,576	2,408,455,662	486.93	486.47

*Not including foreign cotton. †Exclusive of bagging and ties.

AMERICAN COTTON CROP FOR FOUR YEARS

	1930-31 Bales	1929-30 Bales	1928-29 Bales	1927-28 Bales
Port receipts	9,008,667	8,815,930	9,557,256	8,556,783
Overland to mills.....	884,919	1,182,083	1,551,998	1,202,932
Southern consumption	4,319,374	4,950,854	5,623,265	5,316,168
	14,212,960	14,948,867	16,732,519	15,075,883
Less taken by Southern mills from ports	319,805	435,195	947,163	631,949
Total crops	13,893,155	14,513,672	15,785,356	14,443,934
EXPORTS—				
Great Britain	1,089,540	1,269,240	1,862,345	1,439,771
France	938,280	827,675	800,339	899,302
Continent and Channel*	4,692,102	4,558,867	5,340,012	5,256,107
Canada	207,503	196,854	277,031	235,228
TOTAL EXPORTS	6,927,425	6,852,636	8,279,727	7,830,408
Stocks close of year.....	2,782,293	1,547,708	534,810	586,718
Northern mill takings.....	1,465,475	1,713,119	1,975,706	1,843,130
Average gross weight of crop per bale—pounds.....	520.76	522.59	521.21	516.73

*Including to Mexico, Japan and China.

CONSUMPTION AMERICAN COTTON BY GEOGRAPHICAL DIVISIONS

	1930-31 Bales	1929-30 Bales
United States—North	1,437,000	1,739,000
United States—South	4,319,000	4,951,000
Foreign	6,100,000	7,337,000
Total American for year	11,856,000	14,027,000

WORLD'S CONSUMPTION AMERICAN COTTON

	1930-31 Bales	1929-30 Bales
Visible and invisible beginning year...	4,485,000	3,528,000
In sight year.....	*14,107,000	14,994,000
	18,592,000	18,522,000
Visible and invisible close year.....	6,730,000	4,485,000
Burnt at ports.....	11,862,000	14,037,000
	6,000	10,000
World's consumption American cotton..	11,856,000	14,027,000
Lint cotton consumed	11,045,000	13,108,000
Linters consumed..	811,000	919,000
	11,856,000	14,027,000

*Minus 68,000 increase in transit.

WORLD'S VISIBLE AND INVISIBLE SUPPLY AMERICAN COTTON

	Year Ending July 31		
	1931 Bales	1930 Bales	1929 Bales
Mill stocks in U. S. close July	362,000	334,000	360,000
Mill stocks in Europe close July	630,000	620,000	770,000
	992,000	954,000	1,130,000
Japanese port and mill stocks and afloat	426,000	318,000	444,000
Other foreign port and mill stocks and afloat	324,000	125,000	161,000
	1,742,000	1,397,000	1,735,000
Visible supply American	4,988,000	3,088,000	1,793,000
Total visible and invisible supply close July, including foreign stocks	6,730,000	4,485,000	3,528,000

IRON, STEEL AND METAL MARKET

A Slight Decline Last Week in Steel Production

Pittsburgh, August 10—[Special.]—Steel ingot production in July is officially reported at 1,876,149 gross tons, representing a rate of 33.97 per cent of capacity, or a couple of points above estimates made by various authorities from week to week during the month. The rate is down last week to about 32 per cent, and August is likely to hold approximately that rate. Steel men continue to predict a marked upturn for September, beginning early in the month, but hardly as large an increase as they were looking for a month or two ago.

The common view being that it will be a long time at best before steel and some other industries can get back to the good times of two years and more ago, effort is now being directed to meeting the situation. Costs are being pared at every possible point, rigid economies are being introduced, and companies that have not already reduced salaries are now doing so. The Steel Corporation appears to be among the last, as its salary reduction goes into effect August 15, according to rumor 10 per cent on incomes \$1800 to \$5000, 12½ per cent \$5000 to \$10,000 and 15 per cent above \$10,000. One steel company held out until May 1, neither reducing salaries nor laying off anyone; then it gave all salaried employes a day off a week, with one-sixth reduction. If the amount of work should increase, the day could be required again but without increase in compensation.

Months ago there were some wage reductions here and there by smaller concerns, but the steel industry at large is still committed against reducing wage rates because it is using the "stagger" system, rotating employment, which cuts weekly earnings quite deeply. The steel industry has thrown few men entirely out of employment.

Steel producers have also been addressing themselves to the matter of holding prices and removing irregularities, and in this there has been apparently complete success. The industry is falling far short of earning usual dividends, and in this quarter, with production particularly light, it may not make full interest charges. It would still have enough to cover depreciation and depletion charges computed according to regular rules so that it still has some leeway. Many coal companies have been failing to do that.

The open market on bars, shapes and

plates is quite steady at 1.60c, Pittsburgh, and concessions on plates and shapes for large fabricated structural jobs have been curtailed to something like former proportions. The advances in sheet and strip prices which went into force July 1 have held to date but there has not been buying on a scale to test the prices fully, since buyers had a chance to cover at old prices for July deliveries and some probably accumulated a little stock. Asking prices on wire products were recently put up \$2 a ton but jobbers are covered at old prices for the present month.

Current steel buying is of highly miscellaneous character, there being many orders, nearly all very small. The small users of steel are evidently doing better than the large users. Taking steel ingot production at 32 per cent of capacity, that represents an annual rate of 21,500,000 tons. That is fully 45 per cent of average production in the four years 1925 to 1928 inclusive, yet there are various large lines of consumption that were very active in those years and are now doing practically nothing, nowhere near 45 per cent. Oil and gas well material, rails and freight cars all fall in that category so that some other lines must be doing comparatively well.

The scrap market is so dull that it gives no indication whether it is strong or weak at its level. Heavy melting steel stays quotable at \$10.50 to \$11 delivered Pittsburgh district, and a good bit is not being gathered as it would not pay.

Copper Reaches a New Low

New York, August 10—[Special.]—Copper has joined wheat and rubber in dipping to new low prices for all time. Copper has been selling at 7½c per pound in the home market and at 8 cents for export, which is the cheapest since the ancients bartered copper for meal, bearskins or seashells.

Prices of the other major metals have been quite steady. Lead has remained absolutely unchanged in price; zinc has eased off a trifle though is holding remarkably firm considering its rapid rise in June. Tin has been selling considerably higher than its recent lows. Silver has been exhibiting considerable strength, selling as high as 28¼c per ounce as against a recent low of 27¾c. Quick-silver, on the other hand, has dipped considerably to a new low for several

years of \$85 per flask of 76 pounds. Antimony is fairly steady though still inclined to sag, being available at 6½c per pound, duty paid.

Industrial conditions generally are unchanged. The sharp advance in steel operations in the Youngstown district has been followed by an equally sharp decline. The general operating rate in the industry is 30 per cent of capacity and but little improvement in August is now being looked for. However farm implement makers in the Middle West report a much better demand for their product.

The total volume of trade during the past two months appears to have been somewhat larger than in the corresponding period of 1930. Statistics of retail sales compiled by the Federal Reserve Board show that June was the first month in over a year which compared favorably with the corresponding month a year earlier. The announcement of the Administration that it would go ahead with construction and engineering projects to provide employment was of course encouraging.

The export price of copper was marked down Tuesday to 8 cents from 8.25c, c. i. f. (cost, insurance, freight) European ports. The action was somewhat unexpected, though it is true that in the domestic market sales had been made as low as 7½c, which meant that the foreign price was way out of line. On Tuesday export sales for the day were 815 tons, which was somewhat disappointing on the day of a price cut. However this volume was better than on many recent days. Not long ago but 15 tons had been sold abroad in a day.

The copper fabricators reduced prices of such products as bare copper wire, copper and brass sheets, tubing, plates, etc., to a basis of 7¼c per pound for refined copper. Custom smelters are openly at 7¼c per pound though they are known to have sold at 7½c. Most of the primary producers adhere to 8 cents per pound, which is the same price that prevails for export, thus making a unique situation. Domestic buying of copper is very light. Consumers overbought earlier in the year and many will have enough copper to last well into 1932 without purchasing further.

Copper statistics for July will appear at the middle of this week and a further increase in surplus stocks is expected, some predicting a gain by 30,000 tons. Copper has lost its role of leader among the metals. The lead and zinc producers have already done considerable to rem-

edy a bad situation, since surplus stocks of these metals are declining and the price rise of June, \$10 to \$15 per ton, is holding.

Producers of copper in Africa and Canada refuse to cooperate to any great extent in curtailing production of the red metal since their costs of production are still below selling prices. In many cases copper is regarded as the by-product of some other metal and the copper production is regarded as so much "velvet."

Zinc statistics for July appeared Thursday and revealed a decline in surplus stocks of 7,095 tons to the total of 131,833 tons. This is the third month in which there have been substantial reductions in the surpluses of this coating metal and means that the zinc producers have accomplished more than producers of other metals in relieving the situation of unwieldy stocks.

The average daily output in July was 689 tons which compares with 1,056 tons in February, a reduction of 35 per cent in the last five months. In July, shipments into consumption showed an increase for the third consecutive month. The situation looks the best since the depression began in November, 1929. The underlying improvement in the statistical end of the zinc trade accounts for stability of zinc prices. The present quotation of 3.85c per pound, East St. Louis, compares with 3.20c at the low point of the year in the late spring.

Zinc purchasing has been quiet for several weeks but producers interpret this to mean that consumers are getting low on stocks and must come into the market soon again.

Demand for lead is quiet but by no means stagnant. Producers have booked their August production almost completely and have probably sold about 20 per cent of their September production as well. Lead continues to be the steadiest of the markets and has not been affected by depressing influences which have hurt other commodities and securities.

Birmingham Looks Ahead

Birmingham, Ala., August 10—[Special.]—Bright spots are still discernible in iron and steel markets of the South. Industrial leaders are expressing hope that there will be a turn for the better shortly, that plans which are under consideration in various directions calling for material of all kinds and producing and fabricating works in iron and steel will have warrant for greater activity than is noted right now.

Production of pig iron has been readjusted to some extent, the output being

under what it was for the past several months: Blast furnaces, however, are in shape for immediate resumption. In some instances the iron-makers are being operated on slow schedules so that output shall not mount. Melters are buying in small lots but frequently. The aggregate business, it is not denied, is under the make. The surplus stock on furnace yards has not yet reached its maximum tonnage. Melters are carrying very little tonnage on their respective yards, from month to month showing little raw material on their inventories. With the melters, too, there is no effort being made to produce at greater pace than the demand, though in some directions warehouses are kept well supplied so that immediate business can be cared for without waiting for the shops to ship.

A few of the machine shops and foundries have business sufficient to keep in steady operation four and five days a week. Cast iron pressure pipe manufacturers continue their production on a 50 per cent capacity pace. Recent lettings have been mostly from the far West, California and Washington. Bids have been put in on a considerable tonnage of pipe in Chicago and other sections of the Middle West. The South has been in the market for a round tonnage and shipments are being made steadily on these contracts. Opinion is expressed that cast iron pressure pipe demand will be fairly good through the remainder of the summer. Base price of pipe is still stated at \$35 to \$36 on six-inch and over sizes but there is report of concessions.

All melters of pig iron have been served promptly by the blast furnace interests, no matter how small or large the order. Alabama Foundry Co., subsidiary of a gas equipment concern, is operating four and five days a week, with bright prospects for the future announced.

Structural steel fabricating shops, producing bridge and industrial building steel, are catching up some with their backlogs and have been maintaining a five and even six days a week recently. Railroad and highway bridges have been ordered while other business has been coming in. Fabricators of plate, tank and tube makers, have also been quite active and shops have been turning out considerable tonnage, a little quantity of standard sizes being carried on yards. The sheet mills of the Tennessee Coal, Iron & Railroad Company and the Gulf States Steel Company are maintaining a 60 per cent capacity pace. Plate mills of the two companies are also in steady operation. There is demand now for cotton ties, reinforcing concrete bars and other smaller shapes of steel. The necessity of open hearth furnace opera-

tion is noted, 11 out of 23 open hearths of the district being in operation, around 40 per cent capacity. Such improvement as is needed about the rail mills here is being given attention. There is no idea expressed as to when resumption will take place, the railroads advancing no intimation even as to when new purchases will be made.

Coal production is at a minimum in the district and coke production is off. A little coke is still being shipped out but the aggregate is small.

Scrap iron and steel market remains slow and prices low. Heavy melting steel commands no more than \$9 per ton with purchases reported at a lower price.

Seaboard Air Line Railroad is taking 7000 to 8000 tons of blast furnace slag from Birmingham monthly in its steady betterment work on lines in Alabama, Georgia and Florida.

One of the new barges on the Warrior River barge line, Inland Waterways Corporation, has made its maiden round trip. The barge carries three times as much freight as the old type. There will be 10 of these new barges constructed.

PIG IRON

No. 2 foundry, 1.75 to 2.25 per cent silicon, \$12.00 to \$13.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$12.50 to \$13.50; iron of 2.75 to 3.25 per cent silicon, \$13.00 to \$14.00; iron of 3.25 to 3.75 per cent silicon, \$14.50 to \$15.00.

OLD MATERIAL

Steel rails	\$10.00 to \$11.00
Steel axles	12.00 to 12.50
Iron axles	12.00 to 12.50
Heavy melting steel.....	8.00 to 9.00
No. 1 cast.....	9.00 to 10.00
Stove plate	7.00 to 8.00
No. 1 railroad wrought....	8.00 to 8.50
Car wheels	8.00 to 9.00
Tramcar wheels	8.00 to 9.00
Machine turnings	4.50 to 5.50
Cast-iron borings	4.50 to 5.50
Rails for re-rolling.....	10.25 to 11.00

\$800,000 University Contracts

Baton Rouge, La.—Contracts approximating \$800,000 have been awarded by the Board of Supervisors of the Louisiana State University for the construction of a field house and recreation center and a fine arts building here. Caldwell Brothers, New Orleans, were awarded general contracts for both structures, at \$272,000 and \$240,000, respectively. Mechanical contract on the field house and recreation center was awarded to W. J. Rely, Monroe, La., and electrical contract to the Bunn Electrical Engineering Co., New Orleans, and the Baton Rouge Electrical & Machine Works, Inc., Baton Rouge. Mechanical contract on the fine arts building was awarded to the American Heating & Plumbing Co., New Orleans, and electrical work to the Hart Enterprise Electrical Co., Inc., also of New Orleans. Weiss, Dreyfous & Seiferth, Inc., New Orleans, are the architects.

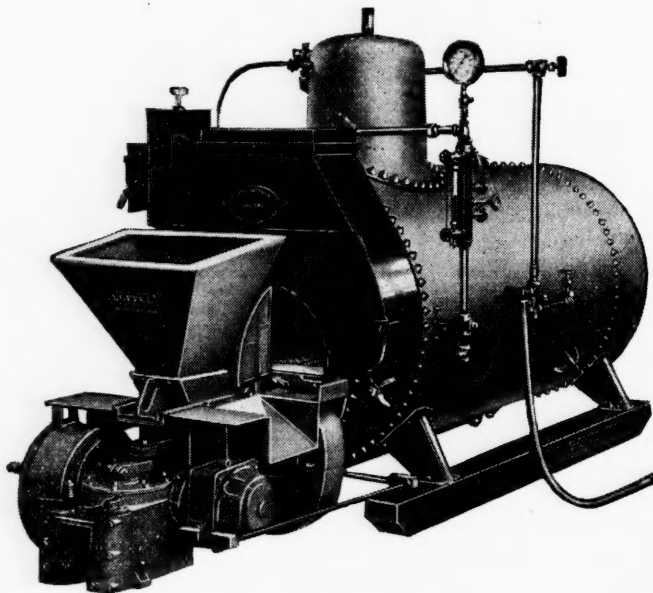
NEW AND IMPROVED EQUIPMENT

Test of Stoker and Boiler

For the purpose of making an evaporation test of the unit, including a heat balance, and also to observe characteristic performance of the Leffel underfeed stoker when applied to the Leffel Scotch Marine boiler, Paul Bucher, Professor of Steam Engineering at Ohio State University, assisted by Professor Roberts of the same institution, conducted a 12-hour test on a 45-horsepower Leffel Scotch Marine type boiler, fired by a new Leffel unit type underfeed stoker. The boiler had been in use 4 years and was badly limed on the inside, which reduced efficiency. Burning 264 pounds of 1½ inch nut and slack coal, with a heating value of 13,989 B. t. u., at a combustion rate of 19.9 pounds of coal per square foot of projected grate surface, the boiler evaporated 2659 pounds of water at 212 degrees Fahrenheit. This gives an equivalent evapora-

tion per pound of coal fired of 10.08 pounds and an efficiency of boiler, furnace and grate of 69.9 per cent. The boiler was fired two hours before commencing the test, which began on a running start at 6:30 A. M. with readings taken at 15-minute intervals, the rate of evaporation being checked at the end of each hour. Conditions were held practically constant throughout the test, and at 6:30 P. M., after 12 hours, the test was ended with water level in boiler, fuel bed thickness, coal level in hopper and rate of steaming and boiler pressure the same as at the beginning. Fires were cleaned twice during the test, 126 pounds of refuse being removed in 7 minutes at the first cleaning, and 98 pounds in 5 minutes at the second. No operating difficulties were encountered in the test and it is said the amount of smoke produced was extremely small. The boiler and stoker are products of The James Leffel & Co., Springfield, Ohio.

Leffel
Automatic
Underfeed
Stoker
Attached
to
Leffel
Scotch
Marine
Type
Boiler,
With
Doors
Open
Showing
Tuyeres

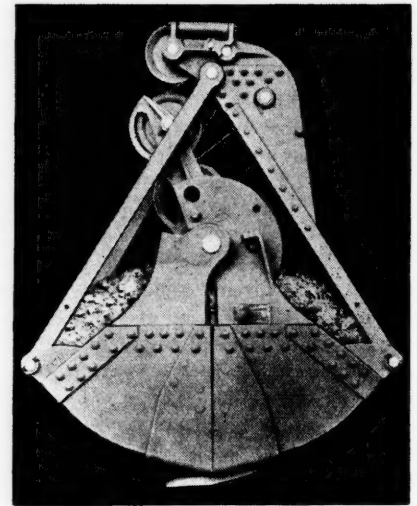


Williams "Champion" Clamshell

A new clamshell bucket, described as having great digging power and said to be especially suitable for handling coarse broken stone and hard excavating work has been introduced by the G. H. Williams Company, Erie, Pa. This new unit, known as the Williams "Champion" clamshell, is said also to effect important savings in cable costs and maintenance. Its digging power is described as due to many improvements now used, together

with the original lever arm principle, "providing straight cable leads which reduce friction on all bearings to a minimum." This is said to permit a high percentage of the closing line energy to be utilized for actual digging. Extended corner brackets projecting beyond the backs of the scoops afford additional closing leverage, and a narrow head of cast steel provides rigid resistance to twisting strains. Extra-long roller guards of a new type and a large transverse roller protect the cable, it is said,

while T-head corner pins fitting into slots in the corner bracket prevent turning as the bucket opens and closes, minimizing

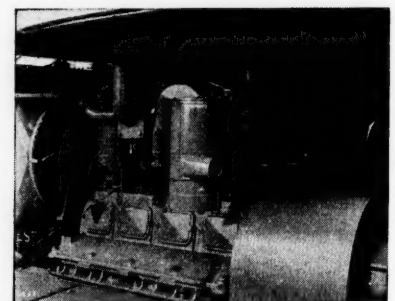


A Bucket With Great Digging Power

wear on the corner bar bushings and holding them in alignment.

Northwest Carburetor

The Northwest Engineering Co., Chicago, announces a new advance in carburetion. This consists of a modern type carburetor and hand idling control, described by the company as a distinct advance in this type of mechanism in a shovel or crane and showing greater power particularly at low speeds in hard pulling; assuring also more responsive throttle opening; steady operation at part throttle and governor idle speeds,



For Large-Size Engines

and better fuel economy. For the present, the device is applied only to larger engines in the Northwest line, users reporting a saving in some cases of as high as 10 gallons of gasoline a day.

CONSTRUCTION DEPARTMENT

and

NEW ENTERPRISES

Covering the initial announcements of new undertakings with additional information about enterprises previously mentioned. The date at the end of an item indicates preliminary facts were given in a previous issue.

When writing to a new firm or corporation the name of at least one of the incorporators should be placed on the envelope to expedite its handling by the local postoffice. Mail may be delayed unless complete address is given.

Building and Construction Proposed and Contracts Awarded; Manufacturing, Mining, Power, and Land Developments; Public Works; Transportation; Communication; Financial Enterprises; New Business Opportunities Reported in the Sixteen Southern States.

The Daily Construction Bulletin of the Manufacturers Record gives each business day advance news published in this weekly review. It is invaluable to those requiring prompt information. Subscription price \$40.00 a year.

Airports, Airplane Plants, Etc.

Ala., Maxwell Field, Montgomery—Following contracts let for construction roads, drains, sanitary sewers and water mains for War Dept.: Roads and water system, Rad Batson Co., Birmingham, Ala.; drainage system, Hornbuckle Contracting Co., 710 McGlawn Bowen Bldg., Atlanta; sanitary sewer system, Carey-Reed Co., Inc., 613 Guaranty Bank Bldg., Lexington, Ky.; outfall sewers, A. J. Honeycutt Co., Martin Bldg., Birmingham, Ala.; M. A. McFadden, Capt. Q. M. C., Construction Q. M. 7-23

La., Barksdale Field, Shreveport—Following contractors received plans and specifications for construction of 4 hangars, 1 hangar and operations building, air corps assembly shop, air corps warehouse; bids opened Aug. 28: Samford Bros., Inc., 301 Washington Ave., Montgomery, Ala.; City Electric Shop, Inc., 1200 Texas Ave., Taylor Seidenbach Co., Inc., 96 Travis St., K. C. Wilson, P. O. Box 549, H. H. Bain Sheet Metal Works, 808 Reynolds St., Welsh Specialties, Inc., Ricou-Brewster Bldg., and Ashton Glassell Co., Inc., 260 Cadillac St., all Shreveport; Rogers and Leventhes, Inc., 822 E. 11th St., Chattanooga, Tenn.; Atlanta Builders Exchange, 212 Builders Exchange Bldg., Smith-Pew Construction Co., 435 Irvin St., N. E., both Atlanta, Ga.; Decatur Iron & Steel Co., Decatur, Ala.; Batson Cook Co., Inc., West Point, Ga. 8-6

La., Barksdale Field—W. M. Werner, Shreveport, general contractor for warehouse, garage and maintenance building at airport, received contract for roofing work for same building at additional bid of \$11,000, bids opened Aug. 3; Capt. Geo. E. Lamb, Constr. Q. M. 7-30

La., Barksdale Field, Shreveport—Electrical Contracting & Engineering Co., 518 Gravier St., New Orleans, reported, low bidder at \$52,750 for electrical distribution system. 7-30

Tex., Dallas—City issue \$300,000 bonds for improvements to Love Field, secure 90 additional acres southeast of Love Field for addition. 7-30

Tex., Duncan Field—War Dept., office of Constructing Quartermaster, Fort Sam Houston, A. F. Dersheimer, Asst. Constructing Q. M., advises plans and specifications for engineering shops at Duncan Field are on file and will be opened Aug. 24; work proposed is construction of 4 buildings as follows: Engineering shops, boiler house, dope house and paint dope and oil storehouse; engineering shop is 1 story, 448x560 ft., with struc. steel frame, walls of conc. and steel sash and saw tooth roof; roofing will be of asbestos protected metal and built up roofing; boiler house is 1 story, 24x74 ft.; dope house is 66x260 ft.; dope, paint and oil storehouse 66x66 ft.; all buildings same type of construction as engineering shop building; large amount of paving, water and sewer mains also included in work. 7-30

Tex., McAllen—C. C. Eckhoff, Chrmn. McAllen-Hidalgo Airport, reported, plans improvements; construct underground system of gasoline pumps, storage tank; rehabilitate 1500 ft. caliche runway, etc. 7-30

Tex., Randolph Field—A. W. Parker, Constructing Q. M., receives bids Aug. 26, deferred from Aug. 19, for pipe and fittings for gasoline fueling system; new specifications filed Aug. 4; also receives bids Aug. 14 for paving aprons for hangars. 7-30

Tex., Randolph Field—Westinghouse Electric & Mfg. Co., 1201 E. Houston St., San Antonio, reported, has contract for ornamental street lighting standards and luminaries, Randolph Field, on numbers 1-2-3-4 and 9 and General Electric Supply Corp., 723 Perez St., San Antonio, on numbers 5-6 and 8; Capt. A. W. Parker, Constructing Q. M. 7-30

Va., Danville—Danville Flying Service, Inc., incorporated; John W. Carter, Jr., Masonic Temple; subleased Danville Airport, from Dixie Flying Service of Charlottesville, Va. 7-30

Va., Langley Field, Hampton—See Sewer Construction. 7-30

Bridges, Culverts and Viaducts

Proposed Construction

D. C., Washington—Following additional estimators on Piney Branch road underpass under B. & O. R. R., Takoma Park, for Dist. Commrs., Roland M. Brennan, 427 Dist. Bldg., bids due Aug. 25: Brann & Stuart Co., Com. Tr. Bldg., Philadelphia, Pa.; J. H. Coleman & Son, Clarendon, Va.; Bahen & Wright, 916 Rhode Island Ave., N. E.; Corson & Gruman Co., 33rd and K Sts., N. W.; L. B. Davidson, Bond Bldg.; National Construction Co., Tower Bldg., all Washington; Llewellyn Jordan, 100 Baltimore Ave., Takoma Park, Md.; Harry Shaw, Silver Spring, Md.; H. W. Cord, 1003 K St., N. W.; Fidelity Construction Co., 1218 Randolph St.; M. Cain Co., 3315 Eighth St., N. E.; W. F. Brenizer Co., 1501 S. Capitol St.; P. T. McDermott, 1014 Wisconsin Ave., all Washington; Newport Contracting & Engineering Co., Lee Hall, Va.; Consolidated Engineering Co., 20 E. Franklin St.; McClintic-Marshall Co., Baltimore Trust Bldg., both Baltimore, Md.; Phoenix Bridge Co., Phoenixville, Pa.; Thos. Sheehan, P. O. Box 508, Hagerstown, Md.; Grier-Lowrance Construction Co., Alexandria, Va.; McNichol Paving & Construction Co. and Shoemaker Bridge Co., 16 S. Broad St., both Philadelphia, Pa.; Harrison-Wright Co., P. O. Box 829, Charlotte, N. C.; Ferris Engineering Co., Pittsburgh, Pa.; Parker & Graham, 50 Church St.; Hercules Construction Co., 21 E. 40th St.; Hart & Early Co., 18 E. 41st St.; L. E. Meyers Construction Co., 84 William St.; Pierce Steel Pipe Corp., 52 Vanderbilt Ave., all New York; W. W. Boxley & Co., Roanoke, Va. 8-6

Fla., St. Augustine—State Road Dept., plans bridge over Sebastian River, State Road 4; Robt. W. Bentley, Chmn., Tallahassee; to be built with state and Federal funds, without cost to city. 7-30

Kentucky—State Highway Comsn. receives bids for 2 bridges. See Roads, Streets and Paving. 7-30

La., New Orleans—City, Engineering Dept., draw plans at once for 800 ft. of approaches to existing bridge over Industrial Canal, Florida Ave., \$70,000; creosoted pile trestle supporting rein. conc. deck with steel I-beam. 7-30

Maryland—State Roads Comsn. has low bids for 3 bridge projects. See Roads, Streets and Paving. 7-30

Md., Baltimore—City, Bureau of Highways, H. L. Lucke, Bridge Engr., Municipal Bldg., opens about Sept. 2 for \$135,000 bridge, Lafayette Ave., in connection with Pennsylvania R. R. electrification program; Whitman, Requaardt & Smith, Engrs., Baltimore Trust Bldg. 7-16

Md., Baltimore—Following additional estimators on 2 bridges under one contract, Warwick Ave., and Garrison Ave., for City, Bd. of Awards, Office of City Register, bids due Aug. 19: Peter D'Adamo Construction Co., Old Town National Bank Bldg.; P. C. Street Engineering Co., 404 St. Paul St.; Consolidated Engineering Co., 20 E. Franklin St.; W. C. Briddell Co., 100 N. Eutaw St.; Catalano & Pecora, Eldorado Apts.; Sidnew McCall, 3404 Marmon Ave.; Forbes-Murphy Construction Co., 326 St. Paul St.; T. D. Claiborne Co., Garrett Bldg.; F. Marine, 2 E. Lexington St.; J. L. Robinson Construction Co., 522 Park Ave.; Jas. F. McCabe Co., Equitable Bldg.; Merritt-Chapman & Scott, Fidelity Bldg.; all Baltimore; John F. Casey Co., P. O. Box 1753; Rust Engineering Co., Koppers Bldg., both Pittsburgh, Pa.; American Steel Engineering Co., 3520 Queen Lane; Sinclair & Grigg, 1518 Walnut St., both Philadelphia, Pa.; Harry T. Campbell & Sons, Towson; Bates & Rogers Construction Co., 75 West St.; Senior & Palmer, 50 Church St., both New York; H. L. Lucke, City Bridge Engr. 8-6

Md., Baltimore—City, H. L. Lucke, Bridge Engr., has low bid from Mullan Contracting Co., 3945 Greenmount Ave., at \$157,960, for Loney's Lane bridge, being built in connection with Pennsylvania R. R. electrification program. 7-30

Mo., St. Louis—City, Bd. of Public Service, City Hall, has low bid from George G. Prendergast at \$67,948 for rein. conc. bridge, Riverview Dr., over Maline Creek. 7-30

N. C., Thelma—Thelma Bridge Co., chartered; P. K. Schuyler, 1024 Vermont Ave., N. W., Washington, D. C.; own and operate bridge. 7-30

Texas—See Roads, Streets and Paving.

Tex., Corsicana—Navarro County Commrs. Court soon call for bids for \$35,000 trestle and bridge over Richmond Creek, Ward bridge crossing; plans drawn by A. F. Mitchell, County Engr. 7-30

Virginia—See Roads, Streets and Paving.

Va., Portsmouth—City Council and Nansemond County Supvrs., have low bids from Zeb Turner Construction Co., Suffolk, for 2 over Lake Cahoon. 7-30

W. Va., Charleston—See Roads, Streets and Paving.

Contracts Awarded

Md., Baltimore—Pennsylvania R. R., W. B. Wood, Engr., Baltimore Improvement, Union Sta., Baltimore, let contract to John F. Casey, Aspinwall St., Pittsburgh, Pa., for bridge, Frederick Ave. 7-23

Mississippi—Columbus & Greenville Ry. Co., G. S. Gaines, Sec. and Treas., Columbus, advises regarding proposed bridge over Yazoo River, Firt Loring, plans contemplate replacing present structure with new and heavier steel bridge; approved by War Dept.; contract let to Virginia Bridge & Iron Co., Roanoke, Va., for fabrication and erection steel work, false work and alteration of piers of existing bridge by railway company's forces; 2 150-ft. fixed spans, one 286-ft. swing span, all designed for Cooper's E-50 loading, est. weight, 539 tons. 7-30

Mo., Keysterville—Chariton County Commrs. let contract to Pan-American Bridge Co., Moberly, at \$30,175, for bridges and culverts. 7-30

Mo., St. Louis—Chicago, Burlington & Quincy R. R. Co., E. F. Hasbrook, Pur. Agt., Chicago, Ill., ordered 450 tons struc. steel for bridge work, from American Bridge Co., 71 Broadway, New York, and 500 tons from McClintic-Marshall Co., Pittsburgh, Pa.

Tenn., Memphis—Jos. Fowler Electric Co., 118 Monroe St., has contract for white way lighting installation and underpass lamps for Summer Ave. viaduct for City. 7-16

Tenn., Memphis—City, R. M. Dozier, Chmn., Bd. of Control, let contract to S. & W. Construction Co., Shrine Bldg., for \$300,000 Summer viaduct. 7-16

Texas—State Highway Comsn. let contracts for 7 bridges. See Roads, Streets and Paving.

Va., Fishersville—Chesapeake & Ohio Ry. Co., C. W. Johns, Ch. Engr., Richmond, let contract to Haley, Chisholm & Morris, Charlottesville, at \$29,100, for undergrade crossing. 7-16

Canning and Packing Plants

Arkansas—See Missouri.

Fla., Dunedin—T. A. Pendleton construct citrus fruit packing plant on Douglas Ave.; capacity 2 cars daily.

Miss., Biloxi—Braun Canning Co., Louis Braun, Pres., reported; will operate Gulf Foods, Inc., new packing plant on front beach; will operate complete crushed oyster shell plant in connection with packing plant; also, reported, planning merger with other plants.

Missouri—Missouri Farmers Assn., Springfield, reported, interested in establishment of several farmer's co-operative canning plants in Missouri and Arkansas.

N. C., Mount Airy—Farm Products Co., Inc., capital \$25,000, incorporated; J. D. Smith, J. G. Wood.

Tex., Harlingen—Texas Citrus Fruit Growers Exchange, Mission, advises will let contract in few days to local bidders on proposed building; conc., stone and stucco, estimated cost \$40,000, to be used for packing of fresh citrus fruit; machinery will be installed by Citrus Machinery Co. of California.

Tex., Edinburg—W. A. Velten, Brownsville, reported, has contract at \$43,000, for packing plant at San Carlos near Edinburg.

Tex., Edinburg—Texas Citrus Fruit Growers Exchange, reported, construct citrus packing plant, San Carlos near Edinburg.

Tex., San Juan—E. E. Whitenburg, McAllen, construct canning plant; cost \$15,000.

Clayworking Plants

Va., Winchester—Colonial Brick Corp., reported, will issue \$60,000 7% bonds.

Concrete and Cement Plants

Md., Baltimore—Arundel-Brooks Concrete Corp., 921 S. Wolfe St., started construction pre-mixed conc. plant; initial capacity 1,000 cu. yds. daily; provisions for 3,000 cu. yds. daily; let contract to Ransome Concrete Machinery Co., 231 N. 12th St., Philadelphia, Pa., through Henry H. Meyer Co., 110 S. Howard St., Baltimore, for 4½ cu. yd. mixer; to Stephen-Anderson Mfg. Co., Aurora, Ill., for steel bins, batchers, weighing equipment, belt conveyor, etc.; engineering and construction by company forces. 7-30

Cotton Compresses and Gins

La., Shreveport—American Compress and Warehouse Co., end of Johnson St., construct \$20,000, frame and sheet metal warehouse on Linwood Ave.

Cottonseed-Oil Mills

Tex., Rule—C. M. Francis will rebuild burned cotton oil mill; will enlarge and install modern equipment; cost \$175,000.

Drainage, Dredging and Irrigation

Ala., Birmingham—City, A. J. Hawkins, City Engr., City Hall, let contract to Peterson & Simmons, Fairfax, Mo., at \$73,700, for channel excavation, Village Creek, 18th St., S. W., to 17th St., S. W. 7-2

Ala., Birmingham—City, A. J. Hawkins, City Engr., opens bids Aug. 20 for widening, straightening and deepening channel of Sec. 9, Village Creek.

Ark., Harrisburg—Morgan Engineering Co., 620-634 Goodwyn Institute Bldg., Memphis, Tenn., advises regarding plans for \$750,000 floodway, Poinsett County, plans well under way, probably take bids about August 27; approx. 30 mi. levee and ditch work, involving 1,800,000 cu. yd. levee and highway embankment, 500,000 cu. yd. new ditches and 500,000 cu. yd. fill removal.

Florida—U. S. Engr. Office, Jacksonville, opens bids Aug. 27 for dredging approx. 4000 cu. yd. material from 7 shoal areas, Oklawaha River, and removal from river of 15 obstructions consisting of snags, logs, stumps and overhanging trees.

Louisiana—U. S. Engr. Office, Poland & Dauphine St., New Orleans, let contract to McWilliams Dredging Co., Canal Bank Bldg., at about \$911,000, for dredging approx. 8,744,000 cu. yd., place measurement, Louisiana and Texas Intracoastal Waterway, Mississippi River-Achafalaya River section, Bayou Blue to Bayou Chene. 8-6

La., Baton Rouge—East Baton Rouge Parish Police Jury, Courthouse Bldg., opens bids Sept. 1 for constructing Comite-Bowman Bayou Canal, Fifth Ward, East Baton Rouge Parish, 2½ mi. long, approx. 40,000 cu. yd. excavation; J. J. Munding, Parish Engr.

Md., Baltimore—Bd. of Awards, Office of City Register, City Hall, opens bids Aug. 19 for maintenance dredging in Baltimore Harbor, comprising Patapsco River and tributaries; Elmer E. Hammond, Harbor Engr., Bureau of Harbors.

Mo., St. Louis—Chief of Engineers, U. S. Army, Washington, has low bid from Dravo Contracting Co., Neville Island, Pittsburgh, Pa., at \$359,500, for 24-in. pipe line dredge for St. Louis Dist.

Okl., Oklahoma—City, L. M. Bush, City Engr., call new bids for straightening channel of Canadian River; draw plans for channel 300 ft. wide instead of 500 ft. 7-23

Tex., Wichita Falls—Wichita County Drainage Dist. No. 2, C. M. Crowell, Pres., tentatively let contract to Coombs & Glade, Wichita Falls, at \$44,406, for ditches between south city limits and Holliday Creek and Call Field. 7-16

Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

D. C., Washington—Following contractors estimating on 15 squares of street and park lighting system, U. S. Capitol Grounds, bids opened Aug. 20: G. M. Gest, Woolworth Bldg., New York City; Outdoor Lighting Service, 332 Michigan Ave., Chicago, Ill.; Reading, Pa.; Harrison-Wright Co., Box 928, Charlotte, N. C.; Warner Service Co., Knoxville, Tenn.; Catalano & Pecora Constr. Co., Eldorado and Haddon Aves., Baltimore, Md.; General Electric Co., Schenectady, N. Y.; Maler Electric Co., 213 E. Hennepin Ave., Minneapolis, Minn.; Newport Contr. & Eng. Co., Lee Hall, Va.; R. H. Bouligny, Inc., 509 Morehead, Charlotte, N. C.; St. John Electric Co., 41 E. Chestnut St., Chicago, Ill.; Joseph Schoenbach, 834 Sutter Ave., Brooklyn, N. Y.; J. B. McCrary Engr. Corp., Atlanta, Ga.; American Cable & Conduit Co., Chester-Twelfth Bldg., Cleveland, O.; Ransome & Anderson, 136 Liberty St., New York City; O'Connell Electric Co., 63 Mt. Hope Ave., Rochester, N. Y.; Street Lighting Service Co., 33 S. Desplaines St., Chicago, Ill.; Greenwood Electric Co., 4849 Chestnut St., and Paul F. Leuthe, 5835 Washington Ave., both Philadelphia, Pa.; David Lynn, Archt. of Capitol. 7-30

Fla., Lake Placid—Cass Brothers, Lake Placid, reported, have contract at \$35,000 for power house near here for John A. Roebeling, Westfield, N. J.; Alexander Blair, Mech. Engr., Lake Placid; coquina stone on conc. walls; struc. steel frame; rein. conc.; 40x40 ft.; 1 story; tile and built-up roof.

Fla., Moore Haven—City will probably rebuild burned electric light plant.

Ky., Ashland—Kentucky & West Virginia Power Co., Inc., 30 Church St., New York, applied for 20 yr. electric light and power franchise.

Kentucky—Kentucky Utilities Co., Louisville, operating power plant at Lock 7, at High Bridge, reported, plans adding 3 ft. to height of dam at Government lock; obtained right of way for raise in water level along Kentucky River, from Lock No. 7 to Lock No. 8, distance of 25 miles.

Ky., Louisville—Louisville Gas & Electric Co., T. B. Wilson, Pres., announced following construction projects including substations and high tension electric transmission line; portion of work started, completion of all projects expected by end of year; one of substations to be located on Young St. north of Payne St., other between 11th and 12th St. west of 7th St. Rd.; high tension line will extend from company's Ohio Falls hydro-electric station to substation south of 7th St. Rd.; additions to Highland substation on Stevens Ave. south of Bardstown Rd. also included; work started Aug. 15 on substation between 11th and 12th Sts. and high tension line; substation will be of so-called outdoor type, an emergency feed line will be run from this substation to central business district; Clifton substation on Young St. will be enclosed in modern brick building designed to look like a branch library; will convert electricity from 60 cycle, 13,200 volt alternating current to 600 volt direct current; type of converting equipment is modern mercury arc rectifier, fully automatic; work on this project will be started within few weeks; addition of mercury arc rectifier in High Substation has been started, completion by Sept. 1. 7-30

La., Hodge—See Miscellaneous Enterprises.

La., Hodge—Louisiana Power and Light Co., Algiers, reported, soon begin construction of high power line, Winnfield to Hodge, to supply power to plant of Southern Advance Bag & Paper Co.; will run parallel with Pershing Highway short distance east of Dodson; surveys made cost \$100,000. 8-6

Okl., Vinita—Public Service Co. of Oklahoma, 300 S. Main St., let contract to R. C. Stueve, 815 E. Third St., at \$10,000 for white way lighting system.

Okl., Wilburton—Public Service Co. of Oklahoma, Tulsa, constructing transmission line from Wilburton to Arkansas state line, distance of 52 miles; 66,000 volt capacity; also building line extension at Vinita to serve Craig County farm.

Tennessee—Holston River Power Co., Johnson City, Tenn., will have hearing Sept. 11 before Virginia State Corp., Richmond, on application for authority to proceed with construction of proposed dam at point in Tennessee near Kingsford which will flood land in Washington county, Va., distance of 8 miles. 7-16

Tenn., Memphis—See Bridges, Culverts and Viaducts.

Texas—Texas Power & Light Co., Dallas, John W. Carpenter, Pres., reported, started construction of 132,000 volt transmission line between Trinidad in Henderson County and Overton in Rusk County to serve East Texas oil fields; line will follow general course of Cotton Belt Railroad, Trinidad to Tyler; built on H-frame pole structures carrying 3 triple strand copper wires; will provide additional power circuit for Tyler also for all types of oil field requirements including pipe line pumping stations; Texas Power & Light Co., recently contracted to serve power to 10 large pipe line pumping stations of Pure-Van Pipe Line Co., subsidiary of Pure Oil Co., Chicago, Ill.; Sun Pipe Line Co., Philadelphia, Pa.; Sinclair-Texas Pipe Line Co., Es-person Bldg., Houston; Texas Pipe Line Co., Houston; Magnolia Pipe Line Co., Dallas, Tex.; and Yount-Lee Pipe Line Co., Beaumont; energy for line will be supplied from steam generating station at Trinidad; burning lignite mined at Malakoff near Trinidad. 7-10-30

Tex., Corpus Christi—Central Power & Light Co., San Antonio, reported, let following contracts for office building Chapparral and Laguna Sts.; General contractor, Wood, Shearman Construction Co., Inc., Furman Bldg., Corpus Christi; electrical, Lyood-Beale-Dittmar Electric Co., E. Houston St.; Corpus M. Marriott, 503 Frost Natl. Bank Bldg., San Christi Plumbing Co., Inc., 925 Steeles St., Corpus Christi, for plumbing and heating; Jno. Antonio, Archt. 7-2

Tex., Overton—Southwestern Gas & Electric Co., Shreveport, La., reported, construct 30,000 h. p. substation at Overton, Rusk County; supply additional electric power to East Texas oil area; transmission substation, one of largest in point of capacity in Southwest, will transform voltage power to be purchased from Texas Power and Light Co., Dallas, over its new highline from Trinidad to Overton; complete about Oct. 1.

Flour, Feed and Meal Mills

N. C., Winston-Salem—Z. D. Hoots, Propr. Ino Milling Co. and Hoots Brothers, Linden St., plans erection of warehouse on Bridge St.; 1 story; brick; 80x90 ft.

Tex., Fort Worth—Universal Mills, offering new issue of \$250,000 first mortgage 6% serial gold bonds through First National Securities Co., Dallas; purpose to retire bank loans incurred in improvements already made, provide additional working capital and for corporate purposes.

Foundry and Machine Plants

La., Shreveport—Moran Tank Works, Ricou Brewster Bldg., reported, plans enlarging plant, Arkansas and Ricon Sts.

La., Shreveport—Lincoln Tank Works, Electra, Tex., reported, will remove entire plant to Shreveport; erect building adjoining Cotton Belt Railway; Tracks 2 miles from Bossier City; manufacture bolted and welded steel tanks for oil field storage, etc.

Md., Baltimore—Baltimore Ship Repair Co., H. J. Moylan, Sec., construct machine shop 821-23 Key Highway; sheet metal; 1 story; 30x70 ft.; construction by owners.

Md., Baltimore—Charles J. Phillips, 1336 Greenmount Ave., construct machine and tool shops 645-53 E. 25th St.; private plans; 2 story; brick; 93x86 ft.; C. E. Parsley, Bldr., 1636 N. Gay St.

Garages and Filling Stations

D. C., Washington—Ourisman Chevrolet Sales Co., construct show room and garage 610 H St., N. E.; 2 stories; 43x144 ft.; brick and conc.

Fla., Bartow—Economy Chevrolet Co., Inc., chartered; Warren S. Winter, R. M. Hosmer.

Fla., Clearwater—Dalby-Parker Motors, Inc., chartered; J. J. Parker, G. H. Dalby.

Fla., Cross City—Gulf Chevrolet Co., Inc., chartered; J. E. Mayo, W. L. Lancaster.

Fla., Daytona Beach—General Auto Service, Inc., chartered; F. R. Gale, 418 Wisteria Road.

Fla., Gainesville—J. B. Stringfellow, Inc., chartered; J. B. Stringfellow, L. B. Stringfellow.

Fla., Lakeland—Correct Oil Service, incorporated; A. R. Carver, M. Taylor.

Fla., Miami—City Finance Co., H. A. Riviere, Pres., having plans completed by John & Coulton Skinner, French Village, LeJeune, Rd., Coral Gables, for office and service building 234 N. E. First St.

Fla., Sebring—Weaver & Poer Co., Inc., chartered; L. D. Poer, C. E. Weaver.

Fla., St. Petersburg—Ace Auto Parts Co., incorporated; M. E. White, 355 First Ave., S.

Fla., Tarpon Springs—Boyd Motor Co., Inc., chartered; D. P. Boyer, F. Stapp.

Ga., Marietta—The Flagler Co., Red Rock Bldg., Atlanta, reported, low bidders for constructing service station for Standard Oil Co.; conc. foundations; stucco and brick; comp. roof.

La., New Orleans—Pan-American Petroleum Corp., Canal Bank Bldg., reported, have revised plans and specification ready for bids, to be opened Aug. 17 for oil station building Canal and N. Claiborne Ave.; changes in plans consist of portion of mansard roof to be metal and tile and minor changes in brick work; station will consist of 3 connected units, 14x18 ft., 23x19 ft., and 25x18 ft.; all of brick and stucco exterior; plastered interior; conc. floor; miscellaneous steel and iron; plumbing, etc.; contractors estimating are: J. A. Petty & Sons, Inc., Audubon Bldg.; Lionel F. Favret, Louisiana Bldg.; Wm. Wallace, Pere Marquette Bldg.; Herman J. Estrade, 7212 Washington Ave.; Gervais F. Favrot, Balter Bldg.; Reilly Ruckstuhl, Inc., 423 Carondelet Bldg. 7-16

Md., Baltimore—Geo. S. Welkert, Fidelity Bldg., construct ramp garage 208-16 W. Fayette St.

Md., Baltimore—Sun Oil Co., Haines & Warner Sts., construct 1 story, brick filling station, S. W. Cor. North and Ellamont Aves.

Md., Elkton—State Roads Comsn., Baltimore, will take bids in about 2 weeks for 1 story mill building, 30x40 ft., and two stables and garages, 16x20 ft. cinder block; and moving office building and garage; Wm. F. Stone, Archt., 2612 N. Charles St., Baltimore. 7-30

Mo., Kansas City—Mrs. Rosa Nigro, 4315 St. John Ave., construct filling station and garage at 217 E. Gregory Blvd.

Mo., Kansas City—Sebastian Patti Construction Co., 626 Lee Bldg., reported, low bidder at \$19,910 for air mail post office and weather bureau building at Kansas City Airport; Matthews S. Murray, Director Public Works.

Mo., Springfield—State Highway Dept., construct garage S. W. Cor. Atlantic St. and Weller Ave.; cost \$33,000; Forcum James Co., Bldr.

Mo., St. Louis—Norma Mfg. Co., 1673 Arcade Bldg., capital \$100,000, incorporated; James B. Kilian, George Sollman.

Mo., St. Louis—Petroleum Delivery Co., 5631 Wells Ave., incorporated; Jacob E. Silberman, Harah R. Rovin.

Mo., St. Louis—Owen Motor Co., incorporated; W. H. Owen, 2323 S. Kingshighway.

N. C., Laurinburg—Service Oil Co., incorporated; John L. McKay, E. Harvey Evans.

Tex., Texas City—Henckel Chevrolet Co., capital \$15,000, incorporated; Lawrence Henckel, George Henckel, Jr.

Va., Newport News—White Motor Sales Corp., capital \$50,000, incorporated; Alton A. White.

Gas and Oil Enterprises

Ky., Bowling Green—Bowling Green Refineries Co., George McGinley, Pres., reported, let contract to Leader Iron Works, Decatur, Ill., for installing stills, tanks and other equipment at plant to be constructed near Memphis Junction on Taylor tract; construction of plant and office building will be by local contractors; Illinois Pipe Line Co., Findlay, Ohio, operating all collecting lines in Bowling Green Dist., reported, begin construction soon of 2½ mile 4-in. pipe line from company's station on Morgantown Rd. 3 miles west of Bowling Green to the refinery. 7-30

Ky., Madisonville—United Petroleum, capital \$20,000, incorporated; W. B. Dozier, F. O. Baker.

Md., Baltimore—Baltimore Fidelity Warehouse Co., Hillen & High Sts., obtained oil plant property and wharves on Curtis Creek from Baltimore Terminal Co. and Seaboard Terminal Co.; property includes pipe lines, a 5000 gal. oil tank, 2 wharves and other facilities near Cabin Branch adjacent to Wollman, 2842 Guilford Ave.; Western Maryland Railway and includes 7 acres of land with riparian rights.

Md., Baltimore—Maryland Counties Gas Co., Lexington Bldg., chartered; Charles E. Wollman, 2842 Guilford Ave.; gas distribution; company organized for exclusive purpose of supplying natural gas to grantors of rights-of-way to Maryland Gas Transmission Co.

Miss., Hattiesburg—Public Service Corp., of Mississippi, Frank K. McGehee, 5214 Vanderbilt St., Dallas, Tex., reported, soon call for bids for construction of local distribution system for natural gas. 6-25

Miss., Jackson—Danciger Oil & Refining Co., incorporated; Garner W. Green, Jr., 647 N. State St.

Mo., Mexico—Citizens petitioned city, Joe C. Davis, City Clk., to vote on natural gas franchise.

Mo., St. Louis—Missouri Industrial Gas Co., subsidiary of Utilities Power & Light Corp., 327 S. LaSalle St., Chicago, Ill., applied for permission to lay 3035 ft. of natural gas mains beneath Bremen Ave. from Second St. to 21st St.

Oklahoma—Great Lakes Pipe Line Co., Terminal Bldg., Fairfax Airport, Kansas City, Mo., reported, let following contracts in connection with building 120 mile pipe line from Osceola, Iowa, to Omaha, Neb., an extension of gasoline line from Northern Oklahoma refineries through Kansas City to Chicago, Ill., Minneapolis and St. Paul; 4-in. and 8-in. pipe contract let to Truman & Smith, El Dorado, Kansas; contract for pump station near Corning, Iowa, let to John Whitehurst, Ponca City, Okla.; contract for terminal building at Omaha let to Permanent Construction Co., 208 S. La Salle St., Chicago, Ill. 1-22

Okl., Erick—City, B. G. Dahsen, Clk., voted \$25,000 gas distribution bonds.

Okl., Miami—City and Tri-State Zinc & Lead Ore Producers Assn., reported, cancelled contracts; plans granting new contract for supply of natural gas for distribution system. 5-14

Okl., Shawnee—City granted gas franchise to Western Service Corp., Oklahoma City. 7-16

Tex., Harlingen—Pure Distributing Corp., T. R. Cowell, Jr., Pres., Corpus Christi, reported, construct gasoline plant; 1 story; all steel and conc.; 120,000 gal. capacity; cost \$15,000.

Texas—Texas-Independent Pipeline Co., (Delaware) reported, construct common carrier crude line from East Texas district to tanker terminals at Norworth, on Houston ship channel; will provide facilities for handling 40,000 bbls. crude oil daily; contract let for 210 miles of 10-in. butt weld steel pipe; contracts to be let soon for equipping 5 main line stations, each to be equipped with 3 motor driven centrifugal pumping units; sub contract let for building of pipe line; six 80,000 bbl. steel storage tanks will be erected on 25 acre lease of Pilot Oil Co., north of Camps, this site to be location of first station on the trunk line; Shamrock Oil & Gas Co., of Amarillo, and Pittsburgh, Pa., reported, sponsoring pipe line project, with John J. Sheerin, Pres., of Shamrock Oil & Gas Co., in charge, temporary offices in Adolphus Hotel, Dallas.

Tex., Dallas—Royal Petroleum Corp., capital \$25,000, incorporated; Cave Johnson, 3450 Shenandoah St.

Tex., Dallas—Transcontinental Oil Co., 601 Third St., incorporated; M. G. Thompson, H. C. Vinson.

Tex., Dallas—Valco Oil Co., capital \$75,000, incorporated; A. V. Lane, Melrose Court.

Tex., Longview—Texota Corp. chartered; Abner D. Swan, Mark T. Wilson.

Tex., Longview—Blutch Drilling Co. incorporated; Leonard M. Levy, B. C. McDonald.

Tex., Pioneer—Concho Refinery Co., H. J. Earls Box 745, San Angelo, will operate 500 bbl. plant at full capacity; within week of completion; will install laboratory equipment. See Want Section—Machinery and Supplies.

Tex., San Antonio—Thomas Tarver, Inc., capital \$25,000, incorporated; E. R. Thomas, Milam Bldg.

Tex., San Angelo—Mintex Oil Co. advises recent increase in capital was for development purposes, consisting largely in prospecting for oil. 8-6

Va., Lynchburg—Lynchburg Gas Co., L. G. Wofford, Mgr., reported, plans \$50,000 improvements to Blackwater St. plant; install new units of equipment, including 2 regular steam boilers, duplicate steam driven gas compressor for distribution purposes and a building to house it; water filtration system and other accessories for manufacture illuminating gas.

W. Va., Charleston—Boone Natural Gas Co., capital \$25,000, incorporated; Dr. R. H. Walker, State St. Bank Bldg.

Ice and Cold-Storage Plants

Fla., Miami—City Ice & Fuel Co., 3220 Jefferson Ave., Cincinnati, O., and Miami, plans 1 story cold storage plant N. W. 15th St. near 7th Ave.; 50x60 ft.; brick veneer; frame.

Ky., Louisville—Merchants Ice & Cold Storage Co., 428 S. Seventh St., reported, acquired 12 story storage plant of Kentucky Refrigeration Co., at 800 Logan St.

Tex., Harlingen—C. W. Parsons, Milan Bldg., San Antonio, reported, construct 1 story, brick and rein. conc. dry ice plant; cost \$60,000; W. L. Hood, Ch. Engr., 1512 Kipling St., Houston; J. M. Martin, Constr. Engr., New York. 7-23

Tex., San Antonio—H. J. Von Rosenberg, 1515 N. Alamo St., reported, has contract for store house, banana and freezer rooms for Scobey Fireproof Storage Co., 315 Medina St. 8-6

Va., Martinsville—Patrick Henry Ice and Storage Corp., capital \$100,000, incorporated; Randolph Perdue, Rocky Mount.

Iron and Steel Plants

Md., Baltimore—Dietrich Bros., 220 E. Pleasant St., have drawings nearly completed for fabrication shop addition, cost \$100,000, 28th and Reese Sts.; 1 story; 200x400 ft.; actual construction to begin in about 10 days; owner builder; work will include receiving, punching, assembly and delivery departments; 3 runways; conc. piles; wood roof, slag covering. 6-4

Land Development

D. C., Washington—Following contractors estimating on lawn sprinkling system (underground) for U. S. Capitol Grounds, east of Capitol Bldg., bids opened Aug. 19: H. E. Crook Co., 28 Light St., Baltimore, Md.; Fred H. Dollenberg, Record Bldg., Towson, Md.; K. Messeeck, Clarendon, Va.; Federal Htg. Corp., Bond Bldg.; W. G. Cornell Co., 1003 K St.; Cranford Co., 3056 K St., all Washington; Newport Contr. & Eng. Co., Lee Hall, Va.; Harrison-Wright Co., P. O. Box 928, Charlotte, N. C.; Dayton Irrigation Co., Dayton, O.; Skinner Irrigation Co., Troy, O.; Tioga Contr. Co., 921 W. Tioga St., Greenwood Electrical Co., 4949 Chestnut St., both Philadelphia, Pa.; Suburban Engr. Co., 15 W. 38 St.; Ransome & Anderson, Inc., 136 Liberty St., both New York City; Catalano & Pecora Constr. Co., Eldorado and Hadson Aves., Baltimore, Md.; Miller Underground Sprinkler Systems, 16640 Log Cabin Ave. and Munz Spraylawn Corp., General Motors Bldg., both Detroit, Mich.; David Lynn, Archt. of Capitol. 7-30

Florida—Port Dixie Corp., Gen. Albert Clayton Dalton, reported president, Hampton, Va., and Jess Lee Spence, Gary, Ind., V. P.; reported, begin construction new airport and railway terminal in Okaloosa County; plans include construction of docks, warehouses and terminal yards, industrial sites and construction of residence facilities for an industrial population.

Fla., Blanton—Blanton Citrus Growers, Inc., chartered; Z. P. Emerson, A. H. Wilder, B. Bruce.

Fla., Citra—Citra Fruit Growers, Inc., capital \$25,000, incorporated; E. B. Borland, M. B. DuPre.

Fla., Everglades—Peninsular Realty Investment Co., incorporated; R. A. Henderson, Jr., R. L. Johnson.

Fla., Jacksonville—Anderson & Lauderback, Inc., chartered; D. W. Anderson, 522½ W. Bay St.

Fla., Lake Wales—Columbia Groves, Inc., chartered; S. L. Holland, W. F. Bevis.

Fla., Miami—Coast Co., Inc., incorporated; D. L. Rosenhouse, Meyer Kiser Bldg.

Fla., Tampa—Hitchcock-Cleveland Corp. incorporated; W. A. Carter, 2942 Bayshore Court.

Fla., Vero Beach—Luther Groves, Inc., chartered; P. Luther, J. M. Knight, B. Knight.

Fla., Vero Beach—Knights Citrus Groves, Inc., chartered; J. M. Knight, P. Luther.

Ga., Thomasville—Seminole Pecan Co. incorporated; B. W. Stone, Thomasville; Chas. Simpson, Monticello.

La., Shreveport—Urban Land Co., Inc., chartered; Pike Hall, Slattery Bldg.

Md., Baltimore—Teal & Walker, Inc., 17 E. Saratoga St., incorporated; George R. Nake.

Md., Easton—Cedar Point Yacht & Country Club, Borden D. Williams, develop golf course.

Mo., Independence—Bundsche Estate Co., capital \$60,000, incorporated; Albert J. Bundschu, 1108 Commerce Bldg., Kansas City.

Mo., Eminence—W. E. Powell and associates of Wichita, Kansas, reported, develop 4700 acre park in Shannon county; erect \$30,000 clubhouse.

Mo., Kansas City—National Crematory & Cemetery Assn. of Missouri incorporated; Max Schuchardt, 435 Ward Parkway.

Mo., Kansas City—Seventy-first St. Realty & Investment Co. incorporated; Kelly Brent, Park Lane.

Mo., St. Louis—Immigration & Homestead Corp., chartered; Raymond W. Shupp, 1124 E. Linden St.

Mo., St. Louis—Vincent Realty Co., incorporated; Albert L. Brinkman, 4312 College St.

N. C., Asheville—Mountain Realty Co., incorporated; E. L. Loftin.

N. C., Goldsboro—Center Streets Corp., capital \$100,000, incorporated; George S. Dewey, W. Ernest Dewey.

S. C., Cheraw—Juniper Land Co., W. Ed. Reid, develop 1700 acres in Chesterfield County for subdivision project.

S. C., Orangeburg—Canal Lake Holding Co. incorporated; J. West Summers, W. H. Rousseau.

Tex., Dallas—City, reported, develop cemetery on Northwest Highway; cost \$1,500,000, to be known as Hillcrest Memorial Cemetery; David L. Robinson, Jr., Asst. City Plan Engr.

Tex., San Angelo—Monarch Holding Co., Inc., chartered; G. E. Poulter, S. A. McCarrall.

Tex., San Antonio—City Plan Commsn. having plans prepared by H. E. Kincaid, Res. Engr., for creation of park around the Alamo; cost \$300,000.

Lumber Enterprises

N. C., Gastonia—Whitesides Lumber Co., capital \$100,000, incorporated; M. J. West, T. S. Lance.

Tex., Lufkin—Standard Fence Co. incorporated; Charles P. Norris, Drexel J. Silbernson.

Va., Clinchburg—Gragg Lumber Co., Amsterdam, Ga., reported, acquired 7 ft. side of double band mill of Holston River Lumber Co.

Mining

Md., Baltimore—Reinhardt Corp., 510 N. Fulton Ave., chartered; Frank G. Reinhardt, Jr., 1835 Edmondson Ave.

N. C., Asheville—State Center Mining Co., incorporated; R. G. Ferres.

N. C., Durham—Celo Mines, Inc., chartered; Jones Fuller, F. L. Fuller, Jr., R. P. Reade.

Miscellaneous Construction

Ala., Mobile—Supt. of Lighthouses, New Orleans, La., has low bid from Republic Creosoting Co., South end of Water St., Mobile, at \$12,478, for furnishing approx.

8910 lin. ft. creosoted yellow pine piles and 154,218 f. b. m. creosoted yellow pine lumber, delivery Mobile.

Ala., Mobile—Harry T. Hartwell, Leo F. Eldridge and H. D. Shaw, all Gulfport, Miss., named as Seawall Comsn.; have tentative plan for immediate consideration of approx. 10 mi. wall; H. D. Shaw will also serve as Ch. Engr., in charge of whole project. 7-30

Florida—Gen. Albert Clay Dalton, Hampton, Va., reported accepted presidency Port Dixie Corp.; reported, soon start work on first unit of \$17,000,000 development project, including constructing docks, warehouses and terminal yards; establishing industrial sites and constructing residence facilities for industrial population.

Fla., Miami Beach—Miami Beach Jockey Club, Miami Beach, and U. S. Shipping Bd., T. V. O'Connor, Chmn., Washington, D. C., let contract to M. R. Harrison Construction Co., 500 N. E. 45th St., Miami, as supervising contractors for race track, consisting of 197-acre island in bay adjoining N. E. 79th St. causeway, and complete race track, including grandstand, clubhouse, stables, track, roadways, lake, landscaping, etc.; est. \$2,000,000.

Louisiana—U. S. Engr. Office, foot of Prytania St., New Orleans, has low bid from Horton-Price Co., El Dorado, Ark., at 8.75 cents per cu. yd. for constructing approx. 650,000 cu. yd. earthwork, south bank Egg Bend, Red River Levee, Second New Orleans Dist. 7-9

Louisiana—U. S. Engr. Office, foot of Prytania St., New Orleans, opens bids Sept. 8 for constructing approx. 3,495,000 cu. yd. earthwork, Second New Orleans Dist.

La., Alexandria—Red River, Atchafalaya and Bayou Boeuf Levee Bd., W. C. Hudson, Pres., clearing right-of-way for proposed Red River levee; to extend from floodgates at mouth of Bayou Rapides, south 3 mi., involving over 550,000 cu. yd. earthwork, and costing several hundred thousand; U. S. government to bear cost and Levee Bd. furnish right-of-way; probably let contract for construction within 60 days.

La., Ferriday—Fifth Louisiana Levee Bd. let contract to Trinityfarm Construction Co., 2519 Oak Lawn St., Dallas, for new lines of levees, make setbacks and enlargement work and other dyke construction, Tensas Parish.

La., New Orleans—U. S. Engr. Office, foot of Prytania St., opens bids Aug. 25 for approx. 860,000 cu. yd. earthwork, Second New Orleans Dist.

La., New Orleans—Bd. of Commrs. of Port of New Orleans, 200 New Orleans Court Bldg., has low bid from Virginia Bridge & Iron Co., Masonic Temple Bldg., for furnishing and erecting struc. steel framing for shed at Charbonnet St. wharf, amounting to approx. 140 tons.

La., Shreveport—Caddo Parish Levee Bd., Neva K. Peatross, Sec., 603 Courthouse Bldg., let contract to New Construction Co., Shreveport, at \$18,263, for levee work; Thompson Levee, 26,000 cu. yd.; Glycerine Bayou Levee, 53,000 cu. yd.; Long Point Levee, 51,500 cu. yd.; Eagle Lake Levee, subsidence restoration, 6000 cu. yd. 7-16

Miss., Vicksburg—U. S. Engr. Office, Vicksburg, commissioned Bowman-Park Aero Co., 306 Realty Bldg., Louisville, Ky., to make aerial survey of 1500 mi. in connection with flood control work on lower Mississippi River.

Missouri—U. S. Engr. Office, 707 Postal Telegraph Bldg., Kansas City, opens bids Aug. 22 for furnishing all labor, minor materials and portion of major materials for dikes and all materials for revetment and performing all work for constructing about 7500 lin. ft. standard pile clump dikes and about 19,000 lin. ft. standard revetment, Missouri River, Little Missouri and Glasgow Bends, 6.5 mi. upstream from Glasgow.

Missouri—U. S. Engr. Office, 1006 McCall Bldg., Memphis, Tenn., has low bid from L. O. Brayton Engineering Co., Dyersburg, Tenn., \$212,048, for 500 lin. ft. bank protection, Mississippi River in vicinity of Island 18. 7-23

N. C., Fayetteville—City, Bd. of Aldermen, considering constructing municipal docks.

Tenn., Memphis—U. S. Engr. Office, McCall Bldg., opens bids Aug. 18 for 1,045,000 cu. yd. earthwork, White River Levee Dist.

Tenn., Memphis—U. S. Engr. Office, 1006 McCall Bldg., Memphis, Tenn., let contract to James Anderson, Bella, Tenn., for about 7800 cu. yd. earthwork, Upper Yazoo Levee Dist. 7-23

Tex., Houston—Harris County Navigation Dist., J. Russell Wait, Port Director, has low bid from Knutson Construction Co.,

Union Natl. Bank Bldg., at \$59,350, for steel warehouse over extension now being built on Dock No. 10; 125x580 ft., steel frame, corrugated galv. iron sides, composition roof, conc. floor, 75,000 sq. ft. floor space. 7-16

Virginia—Chesapeake & Ohio Ry. Co., C. W. Johns, Ch. Engr., Richmond, let contract to Sturm & Dillard Co., Columbus, Ohio, for enlarging and relining Kelly's tunnel, Jerry's Run, at approx. \$190,000.

Va., Richmond—City, R. Keith Compton, Dir., Public Works, has tentative plans for port terminal; 3 units of wharf frontage aggregating 7500 ft. in length, with adequate trackage and roadways and space for warehouses, and with possible reserve area for development of manufacturing and other industries; wharf frontage to be constructed at intervals as needed; John F. Coleman, Const. Engr., 501 Hibernia Bldg., New Orleans, La. (See Miscellaneous Construction, 5-7).

Miscellaneous Enterprises

Ala., Mobile—Waterman Steamship Corp., Merchants Natl. Bank Bldg., advises capital stock of company was increased primarily to take care of requirements in connection with purchase by this company from United States Shipping Board of 14 steel vessels previously operated under trade name of Mobile Oceanic Line by Waterman Steamship Corp., for account of Shipping Board; will take over these ships starting latter part of Sept.; negotiating for Mail Route No. 54, if successful will recondition and reconstruct ships; program to be carried over period of 10 yrs. 8-6

Ala., Troy—T. W. Allen interested in establishing small pecan shelling plant. See Want Section—Machinery and Supplies.

Ark., Fort Smith—Solid Steel Scissors Co., Hurd J. Miller, Pres., 2315 N. 15th St., will probably replace burned building.

D. C., Washington—Southern Hotel Supply Co., 628 Pennsylvania Ave., will probably let contract to C. H. Tompkins, 1608 K St., for factory Fourth and Fla. Ave., N. E.; 3 stories 50x75 ft.; brick and rein. conc. slag roof; steam heat; metal sash and frame; electric elevator.

D. C., Washington—Skinker & Garrett, 1719 L St., N. W., has contract for printing plant for Henry T. Rodier, 717 6 St., N. W.; Gilbert L. Rodier, Archt., 726 Jackson Place, N. W.

D. C., Washington—Colonial Ice Cream Co., 622 Pennsylvania Ave., N. W., erect ice cream plant Ivy St., S. E.; 1 and 2 stories; rein. conc.; 90x125 ft.; slag roof; steam heat; electric wiring; Baer & Scholtz, Archt., 917 15 St., N. W.

Fla., Carrabelle—Carrabelle Beach Amusement Co., Inc., chartered; C. Q. Dykes, W. T. Wathen, C. P. Wathen.

Fla., Fort Pierce—Atlantic Battery Mfg. Co., Inc., H. F. Stanton, Gen. Mgr., owned and operated by Stanton Co., will manufacture storage batteries of all types for use in automobiles and motorboats; standard size and design and with exception of rubber box in which they are contained will be built in company's plant here; will probably start soon manufacture of lead sinkers, used on commercial fish nets; sinkers will be byproduct of battery plant; will install special molds for manufacture.

Fla., Haines City—Haines City Amusement Co., incorporated; C. N. Leach, G. C. Hule.

Fla., Miami—Florida Amusement Enterprises, Inc., chartered; L. L. Headley, 3510 N. W. 17th Ave.

Fla., Miami—Tru-Fruits Products, Inc., chartered; A. C. Middlemass, 744 N. W. 47th Terrace.

Fla., St. Petersburg—Machroom Building Corp. incorporated; H. J. Kocher, M. Kennard, F. Clark.

Fla., St. Petersburg—Florida Growers Publishing Co., 1306 Grand Central Ave., Tampa, reported, leased and will operate Lassing Publishing Co., Second Ave. and 18th St., S.; will specialize in printing of labels for Florida industries; A. Vyrde Ingham, Mgr.

Fla., Umatilla—Mallen Soap Products Co., Towler Bldg., has plant with daily output 4200 lbs. soap products; install additional equipment. See Want Section—Miscellaneous—Machinery and Supplies. 8-6

Fla., West Palm Beach—Knuth's Few Acres Dairy, Inc., chartered; C. F. Knuth, O. C. Knuth.

Fla., Wewahatchka—Gulf Land & Timber Co. incorporated; C. L. Morgan, J. H. Kelley, S. G. Morgan.

Ga., Atlanta—Chas. W. Bernhardt, 353 McAfee St., N. W., reported, has contract for addition to plant of Chas. Leffkoff, 528 Grant St., S. E., for Woodward Ave. Dairy, Lessee; 1-story and basement; conc. foundations; struc. steel; compo. roof.

Fla., Daytona Beach—A. B. C. Bakery Co., Harry Vedder, Pres., 424 W. Volusia St., plans extension; provide additional 1000 ft. of floor space.

Ky., Louisville—Kentucky Macaroni Co., construct brick and conc. addition to factory 2521 S. Floyd St.; cost \$11,000.

Ky., Louisville—Koch Auto Electric Co., 439 E. Broadway, increased capital, \$5000 to \$50,000.

La., Hodge—Southern Advance Bag & Paper Co., Inc., controlled by Advance Bag & Paper Co., 38 Newberry St., Boston, Mass., reported, removing machinery and equipment from paper mill at Howland, Maine, to plant at Hodge; will double present capacity of paper mill; bag factory not to be enlarged at present; Southern Paper and Bag Co. has its own natural gas supply at Hodge and has been generating own power for mill but, reported, has contracted with Louisiana Power & Light Co., Algiers, for power required to operate new unit; unit will require about 20,000 h. p. to be supplied from interconnected system of the Louisiana and Arkansas Power and Light companies tying together 134,000 h. p. at Sterlington steam generating station in Arkansas; Louisiana Power and Light Co., reported, will start immediate construction of 25 mile high tension transmission line of 110,000 volts from Sterlington plant to Hodge; plant reported to involve \$1,500,000; transmission line, \$100,000. 7-23

Md., Baltimore—A. Deckelbaum, 2527 Jefferson St., reported, has contract for cut stone plant, 200 N. Ann St., for Peter Udell, 215 Alsquith St.

Md., Baltimore—Baltimore Ship Repair Co., 821-23 Key Highway, plans construction steel machine shop 30x70 ft.; cost \$35,000; Blaw-Knox Co., Bayard and Warren Sts., will furnish material; W. A. Gotthels, will erect building.

Md., Baltimore—Central Contracting Co., Inc., 927 Park Ave., chartered; Simon Miller, John E. Marshall.

Md., Baltimore—Maryland-New York Steamship Corp., incorporated; Robert Stinson, Baltimore Trust Bldg.; establish freight line Baltimore and New York; acquired steamer Comanche. Spedding Ship Bldg. Co., Inc., Boston and Kenwood Ave., Baltimore, has contract for repairing steamer Comanche.

Md., Baltimore—Krebs Pigment & Color Corp., 256 Vanderpool St., Newark, N. J., advises company on Aug. 1 took over Commercial Pigments Plant at Curtis Bay, will be operated under name of Krebs Pigment & Color Corp.; plans for improvements or expansion not decided. 7-16

Md., Baltimore—Overall Dry Cleaning & Laundry Co., 803 Sarah Ann St., H. Steedman, Pres., erecting brick factory 803 Sarah Ann St. 7-30

Md., Baltimore—Recording Scales Co., Richard B. Tippet, Jr., Fidelity Bldg., organized with \$100,000 capital to place on market a patented device for automatically recording overweight and underweight.

Md., Salisbury—Salisbury Coca Cola Bottling Co., incorporated; Wm. H. Morton, James L. Benjamin.

Miss., Lexington—G. S. Beall, Jr., and John Howard Beall erect steam molasses plant; daily capacity 1000 gal.; Ben Bridges, in charge.

Mo., Kansas City—Mrs. Stover's Bungalow Candies Co., L. T. Jones, Gen. Mgr., 1206 Main St., construct building, N. W. Cor. Linwood Blvd. and Forest Ave.; 49x63 ft., with facilities for boiler and freezing apparatus; capacity 350 gal. ice cream daily; construct driveways, etc.

Mo., Kansas City—Henry L. Doherty, 60 Wall St., New York, reported, acquired interest in Kansas City Journal-Post.

Mo., Kansas City—Feinberg Kosher Sausage Co., Inc., chartered; A. G. Feinberg, 3729 Forest St.

Mo., Kansas City—Concrete Farm Tie Co., capital \$50,000, incorporated; George F. Newton, 3520 Garner St.

Mo., Kansas City—Kansas City Journal Post Co., incorporated; W. Laurence Dickey, 615 W. 56th St.

Mo., Kansas City—Clyde Manor Building Co., Commerce Bldg., incorporated; Frank Carey, Hyden J. Eaton.

Mo., Lexington—Riverview Printing & Pub-

lishing Co., incorporated; W. Douglas Meng, Frank F. Catron.

Mo., St. Louis—Swift & Co., Chicago, Ill., reported, negotiating for plant of St. Louis Independent Packing Co., 3815 Chonto St.

Mo., St. Louis—Varomatic Corp. incorporated; Lewis A. Mapel, 5714 Michigan St.

Mo., St. Louis—Furny Frosty Sales Co., incorporated; Irwin Bentman, 9533 Marlove St.; manufacture frozen confections.

Mo., St. Louis—The Covington Co., incorporated; C. Carpenter, 4934 Pershing St.; construction.

Mo., St. Louis—Santo-Seco Mfg. Co., incorporated; Arthur A. Shirley, 1938 Adlade St.; medicines.

Mo., St. Louis—Acquin Corp. incorporated; Maurice H. Schechter, 316 Wainwright Bldg.; manufacture drugs.

Mo., St. Louis—St. Louis Chemical Co. incorporated; John H. Beckert, East St. Louis, Ill.; J. Edw. Gregg, 521 Loughborough St., St. Louis.

N. C., Charlotte—Correct Time Service Co., capital \$25,000, incorporated; E. R. McCoy, Belmont Road; advertising.

N. C., Charlotte—Goode Construction Co., 11 E. Fifth St., reported, has contract for \$100,000 plant for Interstate Granite Corp. on Hutchinson Ave.; plans include main building, 42x132 ft.; rein. conc. foundation, heavy mill construction; designed to carry 20 ton electric overhead crane; railroad track will run through center; compressor room 22x5 2ft. and office building; plant will be electrically operated; contracts placed for machinery. 7-16

N. C., Charlotte—John Sancken, 623 Ellis St., Augusta, advises at present time do not intend any expansion or improvements to plants recently purchased from Foremost Dairy Products, Inc., 136 Riverside Ave., Jacksonville, Fla.; plants are as follows: Atlanta Ice Cream Co., and J. & A. Dairies, both Atlanta; Charlotte Dairies, Charlotte, N. C.; Richland Dairies, Columbia, S. C.; Macon Dairies, Macon; Savannah Dairies, Savannah; Spartanburg Creamery, Spartanburg, S. C. 8-6

N. C., Lumberton—E. J. Davis & Son, Inc., capital \$50,000, incorporated; E. J. Davis, Sr., E. L. Davis, Jr., tobacco warehouse.

N. C., Wilmington—Norton, Lilly & Co., 26 Beaver St., New York, reported, establish new ship line; import burlap from India; E. Payson Willard, Pres., Willard Bag Mfg. Co., 420 Martin St., interested.

Okla., Oklahoma City—C. E. Haggerty established plant Second St. and Lee Ave., for manufacture patented device for washing clothes and dishes; initial output 5000 machines per month; will operate under name Air Wash Co.

S. C., Columbia—A. A. Fair and F. E. Fair, Bradenton, Fla., and 135 S. Bull St., Hollywood, reported, acquired Dixie Laundry & Dry Cleaning Co., Senate and Assembly Sts.

S. C., Darlington—City Building & Loan Assn., capital \$500,000, incorporated; Samuel Want, J. C. Daniel, F. C. Huff.

S. C., Greenville—American Fidelity Life Insurance Co., capital \$50,000, incorporated; C. S. Bowen, Chamber of Commerce Bldg.

S. C., Spartanburg—Spartanburg Creamery, incorporated; John Sancken, H. R. Creamery.

Tex., Alpine—John Fortner, Marfa, remove cotton fumigation plant from Marfa to Alpine.

Tex., Corpus Christi—Oriental Cleaners, Inc., chartered; J. Roscoe, 413 Peoples St.

Tex., Dallas—Zenith-Casino, Inc., T. E. Millholland, Pres., 109 N. Sarroll St., acquired cleaning and dyeing plant of Brannon Cleaning & Dyeing Co., Bryan and Peak Sts.

Tex., Galveston—Nunez Construction Co., 2311½ C St., capital \$20,000, incorporated; Adam Nunez, Wm. P. Sweeney, John E. Jacobson; wharf construction, pile driving, etc.

Tex., Crosbyton—Carter Nickson Drug Co., capital \$15,000, incorporated; R. C. Carter, W. H. Nickson.

Tex., Sheldon—Ben N. Garrett, assembling material and will soon begin construction of wood distilling plant at Sheldon, on Southern Pacific lines about 20 miles from Houston, near San Jacinto River; has 6000 acres of heavily timbered land. See Want Section—Machinery and Supplies.

Tex., Stratford—Stratford Building Co. incorporated; R. C. Reeder, Arthur Ross, L. M. Price.

Va., Alexandria—Snyder Corp. (Insurance), capital \$20,000, incorporated; Nelson T. Snyder, Jr.

Va., Bedford—Fitch-Carper Co., Inc., capital \$25,000, incorporated; John F. Fitch, Buchanan; automatic drink vending machines.

Va., Lynchburg—Allied Arts Buildings Corp., increased capital to \$250,000.

Va., Lynchburg—Virginia Electric, Inc., chartered; T. J. Burns, Jr., 4107 Tremont St.; electrical engineering.

Va., Portsmouth—W. S. Montgomery, Inc., capital \$50,000, chartered; W. S. Montgomery, Elizabeth City, N. C.

Va., Suffolk—Suffolk Nehi Bottling Co., capital \$20,000, incorporated; L. Q. Hines.

W. Va., Welch—Pocahontas Amusement Corp., capital \$100,000, incorporated; J. W. Blakeley, J. R. Werness.

W. Va., Welch—Air Washer, Inc., capital \$50,000, incorporated; Alwyn G. Oppy, Anawalt; I. P. Jennings, Welch.

Motor Bus Lines and Terminals

Mo., Kansas City—Kansas City & Des Moines Motor Transport Co., 806 Exchange Bldg., 1207 Grand Ave., operates motor bus Kansas City to Des Moines, Iowa; will purchase 9 or 10 ton tractor trailer outfit complete with Van bodies. See Want Section—Miscellaneous.

Railways

D. C., Washington—Washington Ry. & Electric Co., William F. Ham, Pres., and Capital Traction Co., J. H. Hanna, Pres., deny reports negotiations under way by capitalists for lease of trolley systems in Washington.

Florida—Port Dixie Corp. project. See Land Development.

Md., Baltimore—Pennsylvania R. R., M. W. Clement, V-Pres., Philadelphia, Pa., in charge of operation, announced work will begin at once on constructing new conduit system, in connection with electrification program to carry signal, telegraph and telephone lines underground between Wilmington, Del., and Washington, D. C., through Baltimore; total cost of entire project, including installing extensive new cable lines, approx. \$7,000,000; includes over 100 miles conduit; construction of new conduit line will complete underground installations of railroad company's entire system of telegraph, telephone and signal wires from New York to Washington, 225 mi.; conduit consists of 6 ducts in which various wire systems will be installed; these include railroad important communication system and signal system, governing operation of all trains; carrying 108 strands wire in communications cable, new telegraph and signal system will require over 11,000 mi. wire between Wilmington and Washington; special trains, carrying mixers and cars of material for manufacturing conc. on ground, will be used to speed work; mechanical conveyors on concrete will feed conc. direct from mixers to excavations. 8-6

N. C., Jackson—Carolina and Northwestern Ry. Co., capital \$50,000, chartered; Herman O. Carlton, R. Otis Carlton.

Texas—Atchison, Topeka & Santa Fe Ry., M. J. Collins, Gen. Pur. Agt., Chicago, Ill., inquiring for gas-electric rail motor car, 80 ft. long.

Tex., Eagle Pass—Winter Garden Belt Ry. Co., W. O. Fitch, Eagle Pass, let tentative contract to Walter Dennison & Sons, Cushman, Ark., for railroad, Asherton, through Carrizo Springs to Eagle Pass. 4-16

Tex., Shamrock—Fort Worth & Denver City Ry. Co., R. C. Gowdy, Ch. Engr., Denver, Colo., advises regarding work involved in constructing line, approx. 113 mi. long, Childress on main line of Fort Worth & Denver City Ry., through Wellington on M-K-T, Shamrock on Rock Island and Le fors to Pampa on line of Santa Fe Co.; approx. 1,693,000 cu. yd. earth excavation, 1,093,000 cu. yd. earth borrow, 162,000 cu. yd. loose rock excavation and 160,000 cu. yd. solid rock excavation, approx. 9000 ft. treated pile trestle bridges; bids for grading, bridging and placing culvert pipe were to be received at Fort Worth, Tex., Aug. 11 and contract will be awarded as soon as practicable. 8-6

Va., Roanoke—Norfolk & Western Ry. Co., C. Cocke, Pur. Agt., ordered 1700 tons plates, shapes and bars from Carnegie Steel Co., Pittsburgh, Pa., for 450 hopper cars to be built in railroad's shops; also ordered 500 tons steel for parts from American Car & Foundry Co., 30 Church St., New York, and 200 tons shapes from Virginia Bridge & Iron Co., Roanoke.

Roads, Streets and Paving

In connection with **LAND DEVELOPMENT** large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

Ala., Birmingham—City, A. J. Hawkins, City Engr., opens bids Aug. 20 for bridge and paving.

Ala., Mobile—City Comsn. considering re-paving St. Francis St.

Georgia—State Highway Bd., J. W. Barnett, Chmn., Atlanta, advises bids will not be received on Proj. 177, Bryan-Liberty Counties, on Aug. 14, as advertised. 8-6

KENTUCKY—State Highway Comsn., H. D. Palmore, Engr., Frankfort, opens bids Aug. 26 for 2 roads and 2 bridges in following counties:

Boyd—overhead railroad crossing and approaches, Fifth St. and Winchester Ave. to 400 ft. north of Boyd-Greenup County line, 1.6 mi.; separate bids on: Substructure, abutments, piers, pedestals, pile bents, piles and retaining walls; superstructure, 23 I-beam span, 102-ft. plate girder span, steel towers and bents, conc. floor, sidewalks, stairway and lighting system, complete and ready for traffic; approaches, grading and draining.

Calloway—7.4 mi. surfacing, Murray-Hazel road, Murray to Hazel.

Franklin—bridge and grading approaches over Elkhorn Creek, approx. 10 mi. north of Frankfort, Frankfort-Owenton road, 5 50-ft. conc. deck girder spans, rein. conc. piers and abutments.

Marshall—5.4 mi. surfacing, Benton-Mayfield road, Benton to end of graded road near New Constitution Church.

Ky., Lexington—City Comms., adopted resolution for widening N. Limestone St.; Col. W. C. Wilson, Commr. of Public Works.

Louisiana—State Highway Comsn., Room 614, Louisiana Natl. Bank Bldg., Baton Rouge, opens bids Aug. 25 for washed and screened gravel, sand-clay gravel, reef shell, clam shell, crushed limestone, slag and sand for maintenance for month of September.

La., Baton Rouge—East Baton Rouge Parish Police Jury, Road and Bridge Committee, opens bids Aug. 18 for furnishing 2000 cu. yd. washed gravel placed in trucks at point on banks of Amite River; also for furnishing, hauling and spreading approx. 2000 cu. yd. washed gravel on several roads; also hauling and spreading approx. 2000 cu. yd. gravel on roads.

La., Houma—City, T. B. Smith, City Engr., opens bids Aug. 22 for paving and sub-surfacing and draining, Main and Barrow St.

MARYLAND—State Roads Comsn., L. H. Steuart, Sec., Baltimore, has low bids for 7 roads and 3 bridge projects in following counties:

Baltimore—2.05 mi. conc. header and base and conc. shoulders, Sparrow Pt. road, B-218-411, Raffael Harcanoni, 313 Exeter St., Baltimore, \$10,594;

Calvert—2.05 mi. gravel, Port Republic-Broom Island road toward Parker's Wharf, 1 mi., and Port Republic-Broom Island road toward Williams' Wharf, 1.05 mi., Boatwright, Russell & Linton, Manassa, Va., \$15,549;

Carroll—single-8-ft. span conc. slab bridge adjacent to existing bridge, Littlestown Pike, C1-99-511, Fredericksburg Bridge Co., Fredericksburg, Va., \$3905;

Harford—1.69 mi. macad., Churchville to toward Level, H-127-44, T. B. Gatch & Sons Contracting & Building Corp., 5937 Belair Rd., Baltimore, \$27,895; 0.31 mi. macad., Union St., Havre de Grace, H-133-44, T. B. Gatch & Sons Contracting & Building Co., \$8822;

Montgomery—extensions and alterations to 3 bridges, Rockville Pike, M-170-311, C. H. Matson, Tacoma Park, \$8680;

Wicomico—alterations and timber floor on existing bridge over Nanticoke River, Sharptown, Smith Bros., Galesville, \$13,970, W1-61-17;

Wicomico-Somerset—7.87 mi. conc. and 0.81 mi. conc. shoulders, Salisbury-Princess Anne road about 1.6 mi. south of Fruitland road via Eden & Loretta to Princess Anne, W1-79, S-33-13, Roberts Paving Co., Salisbury, \$147,097;

Worcester—single leaf, bascule bridge together with bascule pier approaching span, operator's house, electrical equipment, machinery, etc., over Pocomoke River, Snow Hill, 69-17, J. S. Bowers, Whitehill, N. C., \$100,968. 7-30

MARYLAND—State Roads Comsn., L. H. Steuart, Sec., Baltimore, opens bids Aug. 18 for 2 roads in following counties:

Baltimore—1.34 mi. macad., Stringtown road, Falls road to point near Butler, B-213-44;

Prince George's—2.50 mi. conc. shoulders, Riggs road, Ager road to Old Powder Factory road, P-186-311.

Md., Baltimore—City, Bd. of Awards, Office of City Register, opens bids Aug. 19 for Cement Concrete Cont. 602, 13,650 sq. yd.; Sheet Asphalt Cont. 603, 7800 sq. yd.; Nathan L. Smith, Highways Engr.

Md., Baltimore—City, Nathan L. Smith, Highways Engr., has low bid from Arundel Construction Co., 910 Trinity St., at \$25,008, for Cont. 598, 96,000 sq. yd. cement conc. paving; from P. Reddington & Son, 2 E. Lexington St., at \$11,450 for Cont. 599, 30,000 cu. yd. grading. 7-30

Md., Fort George G. Meade—Constructing Quartermaster has low bid from Harrison-Wright Co., 4 W. Third St., Charlotte, N. C., at \$27,064, for constructing main roads, service roads, water lines, sanitary sewers and storm water lines, manholes and underground electric distribution system for officers' and non-commissioned officers' areas. 7-30

Miss., Vicksburg—City, S. S. Patterson, City Clk., opens bids Aug. 17 for paving streets.

N. C., Warrenton—City Street Committee opens bids Aug. 20 for approx. 41,000 sq. yd. surface treated tar and asphalt streets; W. H. Boyd, City Engr., Henderson.

Texas—State Highway Comsn., Gibb Gilchrist, Highway Engr., Austin, appropriated \$7,997,225 for maintenance work in 18 divisions, to be expended during fiscal year starting Sept. 1; fund to be supplemented with county funds; made maintenance allotments available totaling \$245,000 and ordered new construction started with state funds totaling \$100,000.

TEXAS—State Highway Comsn., Gibb Gilchrist, Highway Engr., Austin, plans 2 roads and bridge in following counties:

Bexar—7.7 mi. patching and surface treatment of gravel shoulder with limestone rock asphalt, Highway 3, west city limits of San Antonio to 9.1 mi. east of Medina County line, \$8450;

Bowie—9.5 mi. oil mixed surfacing, Highway 98, Simms to Boston, \$22,066;

Burnet—repairs to Colorado River Bridge, Highway 108 near Marble Falls, \$4000.

Texas—State Highway Comsn., Gibb Gilchrist, Highway Engr., Austin, rejected bids for 4.4 mi. grading, draining, Highway 40, Cooke County, and for M.-K.-T. overpass, Highway 31, McLennan County, near Waco. 7-16

Tex., Brownsville—Cameron County, H. M. Skelton, County Aud., opens bids Aug. 27 for road work: Conc. pavement on A-43, Boca Chica road, Paredes Line road to 14th St. road, 1.5 mi.; grading, draining, B-38, Boca Chica road, Paredes Line road to 14th St. road, 1.5 mi.; Morton road, along north city limit line of Brownsville, 1.1 mi., B-39; 4.8 mi. Coffee road, State Highway 4 to 14th St. road, B-40.

Tex., Houston—Gibraltar Construction applied to City Council for permission to improve 2 streets with inverted penetration surfaces under private contracts.

Tex., Yorktown—City, W. Westhoff, Mayor, tentatively let contract to Alamo Paving Co., 321 Dawson St., San Antonio, at \$27,442, for constructing widening pavement, Main St. 7-30

VIRGINIA—State Dept. of Highways, C. S. Mullen, Ch. Engr., Richmond, opens bids Aug. 25 for 2 roads and bridge in following counties:

Chesterfield—bridge, 27½ ft. long, over Kingsland Creek, Richmond - Petersburg Turnpike, 5 mi. from Bellwood;

Norfolk—13.5 mi. macad., Route 40, Deep Creek to North Carolina line;

Roanoke—14 mi. 30-ft. macad., Route 33, extending from northern limits of Roanoke city.

Va., Richmond—Governor John Garland Pollard authorized John M. Purcell, State Treas., to make loans as needed for highway work during fall.

Va., Richmond—City, Dept. of Public Works, opens bids Aug. 18 for 10 grading, graveling, curbing and guttering jobs, West End, North Side and South Side, including 13,925 cu. yd. excavation, 16,500 sq. yd. gravel surfacing and 8000 lin. ft. curbing and guttering; A. Mason Harris, Ch. of Bureau of Streets.

W. Va., Charleston—Kanawha County Court opens bids Aug. 24 for 4 roads and 3 bridges: 3 mi. grading, draining, Ronda-Giles road, Cabin Creek Dist.; 3.5 mi. surface treatment, road on right fork Poca River; 1 mi. surface treatment, Tupper's

Creek-Johnson Bridge road; substructures of Miami and Dawes bridges over Cabin Creek and bridge over Davis Creek.

W. Va., Parkersburg—Wood County Court instructed W. A. Boso, County Road Supvr., to proceed with improving Pond Creek road, starting at end of stone road and extending to Boso's Store, 6 mi.

Contracts Awarded

Ark., Bentonville—Benton County Comms. build 12 mi. road between Rogers and Cave Springs with own forces.

Ky., Louisville—Brown Construction Co. has contract for paving 49 streets under private contract.

La., Bastrop—Morehouse Parish Police Jury let contracts for 1.6 mi., Gallion-Bonidee Highway, Road and Bridge Dist. No. 4 and for 119-ft. bridge over Bonidee River: Creosoted and untreated lumber and piling to American Creosote Works, Inc., 1305 Dublin St., New Orleans, at \$957; heart lumber to Parlor City Lumber Co., at \$378; gravel, Clements Sand & Gravel Co., West Monroe, at \$3980; bridge construction, J. J. McMichael Co., Castor, at \$914; 1.6 mi. highway, Alexandria Contracting Co., 907 Fourth St., Alexandria; J. Lestear White, Parish Highway Engr. 7-16

La., Opelousas—City, R. L. Fields, City Clk., let contract to B. J. Carbo, 212 20th St., Alexandria, for 1875 ft. conc. paving, curb and gutter, 15 ft. wide; M. J. Goudeau, Jr.

La., Wisner—City, Mayor and Bd. of Aldermen, let paving Main St.; J. M. Fourmy, dermen, let contract to R. L. Young, Bas-Engr., Hammond. 7-16

Maryland—State Roads Comsn., L. H. Steuart, Sec., Baltimore, let contract to Jarboe & Houghton, Mechanicsville, at \$17,382, for 0.95 mi. gravel, Solomon's Island road toward Governor's Run, C-52-84. 7-30

Md., Baltimore—City, Nathan L. Smith, Highways Engr., let contract to Mahoney Bros., 1111 Rutland St., at \$22,626, for 11,000 sq. yd. conc., Alley Cont. 145. 8-6

Md., Laurel—City, J. H. Petty, Mayor, let contract to Maryland Sales & Engineering Co., Laurel, for approx. 1 mi. sidewalks. 7-23

TEXAS—State Highway Comsn., Gibb Gilchrist, Highway Engr., Austin, let contracts for 38 roads and 9 bridges, totaling \$2,173,753, in following counties:

Harris—2.9 mi. conc. and shell shoulders, Highway 35, Russ Mitchell, Inc., 710 Petroleum Bldg., Houston, \$35,217;

Palo Pinto—8.1 mi. traffic-bound macad. base course, Highway 24, Brown & Root, Inc., Norwood Bldg., Austin, \$37,866;

Ellis-Dallas—7.2 mi. bitum. surface treatment on limestone and gravel base, Highway 6, N. P. Turner, Marshall, \$51,611;

Houston-Trinity—4.9 mi. grading, draining, Highway 19, G. E. Lucas, Sacul, \$28,066;

Dewitt—8.6 mi. grading, draining, conc., Highway 72, McCall Engineering Co., 307 Amicable Bldg., Waco, \$46,679;

Trinity—steel, conc. and treated timber bridges, Highway 19, over Tantanogoe Creek and relief, Ed Pettus, Montgomery, Ala., \$19,414;

Motley—1881 ft. steel, conc., treated timber bridges, Highway 18, over Middle Pease River, Tom Ball Creek, North Pease River and Quitaque Creek, Field Bros. & McCelvey, Lubbock, \$67,278;

Colorado—steel, conc. underpass, Highway Highway 71, Gulf, Harrisburg & San Antonio R. R., John F. Buckner, Cleburne, \$7926;

Potter—142 ft. steel, conc. bridge, Highway 5, over Amarillo Creek, McClung Construction Co., 1309 Fort Worth Natl. Bank Bldg., Fort Worth, \$15,143;

Kinney—18.6 mi. grading, draining, Highway 3, W. W. Vann, Mercedes, \$125,278;

Kendall—14.8 mi. grading, draining, Highway 9, Tom Archer & Co., 308 Baurlin St., Fort Worth, \$83,283;

Wharton—steel, conc. overpass, Highway 12, Gulf, Harrisburg & San Antonio R. R., John F. Buckner, Cleburne, \$14,583;

Tarrant—7.8 mi. conc., Highway 34, Standard Paving Co., 251 Majestic Bldg., Fort Worth, \$128,313; 8 mi. conc., Highway 114, Dexter Construction Co., Hangar 10, Love Field, Dallas, \$117,418;

Denton—13.8 mi. conc., Highway 114, Dexter Construction Co., \$119,241;

Carson-Potter—17.4 mi. grading, draining, conc., Highway 75, Highway Construction Co., Daniels Bldg., Tulsa, Okla., \$271,814;

Brown—10.3 mi. triple asphalt treatment on water bound broken stone, macad. and calicho bases, Highway 129, E. R. Leach, 1212 Allen Bldg., Dallas, \$92,213;

Crockett—15 mi. grading, draining, Highway 163, A. B. Murdoch, 3012 Pennsylvania St., Dallas, \$40,777;

DeWitt—427 ft. steel, conc. bridges, High-

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

way 72, over Big Brushy Creek and relief, Swindell & Sanka, Dallas, \$20,538;
Calhoun-Jackson-Matagorda—conc. and treated timber bridges, Highway 57, over Cox Creek (96 ft.), Kellers Creek (305 ft.), Carancahua Bay (2338 ft.), Five-Mile draw (77 ft.), and Reed's Creek (191 ft.), Monarch Engineering Co., Box 962, San Antonio, \$98,4966;

Tarrant—9 mi. rein. conc. retaining wells and subsurface draining, Highway 34, Jagoe Construction Co., Denton, \$26,275;

Jasper—7.6 mi. grading, draining, Highway 45, A. L. Mays, Jasper, \$37,468;

Jim Wells-Kleberg—13.8 mi. grading, draining, Highway 141, E. P. McElwrath Construction Co., Corsicana, \$43,151;

Matagorda—5.7 mi. grading, draining, Highway 57, Letulle & Neary, Bay City, \$15,874;

Lubbock—12.2 mi. conc., Highway 9, Womack, Henning & Rollins, Sherman, \$224,994;

Van Zandt—10.8 mi. conc., Highway 15, Central Bitulithic Co., Praetorian Bldg., Dallas, \$187,152;

Araugas—11.4 mi. shell base, Highway 57, Brown & Root, \$35,168;

Shelby—6.5 mi. gravel base course, Highway 35, Ernest Loyd Sand & Gravel Co., Texas Natl. Bank Bldg., Fort Worth, \$80,61;

Baylor—13.4 mi. 3/10-gal. seal coat surface, Highway 23, Morgan Engineering Co., Mercantile Bank Bldg., Dallas, \$8877; 13.6 mi. 3/10-gal. seal coat surface, Highway 30, Jagoe Construction Co., \$8761. 7-16

Wheeler—16.3 mi. conc., Highway 75, Interstate Construction Co., Lubbock, \$260,713;

Potter—6.4 mi. grading, draining, conc., Highway 5, Earl W. Baker & Co., Perrine Bldg., Oklahoma City, \$104,502;

Sterling—19.7 mi. triple asphalt surface on caliche base, Highway 9, Dozier Construction Co., Littlefield Bldg., Austin, \$112,458;

McLennan—10.1 mi. grading, draining, Highway 7, E. G. Powell, Jacksonville, \$47,387;

Reeves—20.9 mi. grading, draining, Highway 17, C. E. Armstrong & Son, Pecos, \$79,295;

Cherokee—5.5 mi. grading, draining, Highway 40, George W. Condon Co., 221 Grain Exch. Bldg., Omaha, Neb., \$34,686;

Wharton—13.7 mi. grading, draining, Highway 60, E. G. Powell, \$43,632;

Harris—3.1 mi. grading, draining, conc. Highway 19, S. & H. Construction Co., Milwaukee, Wis., \$114,404; underpass drainage system, Russ Mitchell, Inc., Petroleum Bldg., Houston, \$5811;

Panola—6.9 mi. conc., Highway 64, S. H. Construction Co., \$74,107;

Madison—Town Branch, Caney Creek and relief bridge, Highway 90, J. S. Moore & Son, Lufkin, \$20,747;

Crockett-Irion—Buckhorn draw and 9 multiple box culverts, Highway 163, Grouch & Nolan, Strawn, \$35,075;

Karnes—13.6 mi. caliche and limestone, Highway 72, Cocke & Braden, Marshall, \$81,322;

Reagan—18.6 mi. grading, draining, Highway 99, E. F. Bucy & Son and C. T. Childs, Rising Star, \$38,714;

Madison—3.6 mi. grading, draining, Highway 90, J. P. Foty, 411 Burt Bldg., Dallas, \$20,735;

Calhoun—7.5 mi. grading, draining, Highway 57, F. W. Heldenfels, Rockport, \$27,596;

Crockett-Irion—14.4 mi. grading, draining, Highway 163, P. W. Bertram, Box 1233 Waco, \$35,626. 7-11

Tex., Dallas—Southern Paving Co., 3101 Flynn St., has contract, at \$22,104, for paving Lamar-McKinney viaduct; Ro-Nile Electric Co., 3224 Knox St., at \$13,720, for lighting fixtures.

W. Va., Clarksburg—Harrison County let contracts for several road projects: 7 mi. grading, draining, stone base, Thomas Fork road, J. E. Lanham, Wilsonburg, \$5434; 3100 ft. grading draining, stone base, Shinn Run road, J. E. Lanham, \$4898; 5 mi. grading, draining, stone base, Nolan's Run road, W. F. Allen & Co., Union Bank Bldg., Clarksburg, \$4211; 7 mi. reshaping and resurfacing, Wyatt-Marion County Line road, Paul S. Horner Co., Horner Bldg., Clarksburg, \$4643; 2 mi. grading, draining, Johnstown road, G. A. Kesling & Son, Wyatt, \$6359; 2 mi. conc. paving, Lost Creek-McWhorter road, Fucy Bros., Weston, \$30,030; Grass Run bridge, W. W. Cornwell, Bridgeport, \$1942; 1 mi. grading, draining, Grass Run road, W. F. Allen & Co., \$3895; 5 mi. stone base, Kincheloe Creek road, Fucy Bros., \$2542; 1 mi. stone base Isaac Creek road, Fucy Bros., \$4825; 5 mi. stone base, Jarvisville road, Fucy Bros., \$2542; rejected bids for retreat, Davison Run road, Bartlett Construction Co., low bidder (held up); resurfacing, Wyatt-Marion County line road, Paul S. Horner Co., low bidder, \$3643 (held up); rejected bids for Ten-mile Creek road.

Ala., Tuscaloosa—Jacobson and Mortenson, Hammond, La., have general contract for sewer system; Alabama Concrete Pipe Co., Inc., 3032 Fayette Ave., Birmingham, will furnish pipe along trench line; cast iron pipe will be furnished by Central Foundry Co., Comer Bldg., Birmingham; brick for manholes will be made at Fox plant of Stephenson Brick Co., Allen and Jemison, local dealers; a bituminous joint, Kalkite, made by Prestite Engineering Co., 4067 Park St., St. Louis, will be used on part of sewer; remainder of joints made with Portland Cement mortar; line to be complete by Feb. 1, 1932. 7-30

Ga., Atlanta—City, L. A. Walker, Pur. Agt., receives bids Aug. 17 for Brookwood outfall sewer, addition to storm sewer at Moreland Ave. and Delaware Ave. See Want Section—Bids Asked.

Ky., Louisville—Comms. of Sewerage, Frank D. Rash, Acting Chrmn., receives bids Aug. 20 for constructing Mill Creek trunk sewer, Contr. No. 58. See Want Section—Bids Asked.

Md., Baltimore—Treas. Dept., Office of Jas. A. Wetmore, Acting Supv. Archt., Washington, D. C., receives bids Sept. 2 for permanent sewer work at U. S. Immigration Station, Baltimore. See Want Section—Bids Asked.

Md., Baltimore—Bd. of Awards receives bids Aug. 19 for sewers, Storm Water Contr., 166.

Md., Baltimore—D. Cellinese, 213 S. High St., has contract for sewers, Storm Water Contr. 168. 8-6

Md., Parkville, Branch of Baltimore—Metropolitan Sanitary Dist., Baltimore County, Samuel Green, Ch. Engr., Towson, will take bids in the fall for sewers, Parkville section.

Miss., Hattiesburg—City, R. A. Chapman, City Engr., receives bids Aug. 13 for labor, material and equipment for construction sanitary sewers. See Want Section—Bids Asked.

Mo., Carthage—V. E. Hook, has contract for sewer in district east of Bois d'Arc St. and from Central Ave. south to Fifth and Sixth Sts.

Mo., Jefferson City—City Council directed F. E. Ross, City Engr., to create Sewer Dist. No. 50.

Mo., St. Joseph—City rejected bids opened July 1, for sewers; Oscar H. Schmidt, 112 N. Ninth St., low bidder for sewers, bids opened Aug. 4, in Dist. No. 149 and Dist. No. 168. 7-30

N. C., Roxboro—Elliott Building Co., Hickory, has contract for construction of proposed outfall sewer extension; vit. clay sewer pipe with bituminous joints will be used; Spoon & Lewis, Conslt. Engrs., 432 Jefferson Bldg., Greensboro. 7-30

Okla., Tulsa—City, H. A. Parker, Engr., reported, rejected bids for sewers, Proj. Nos. 308, E-30, 2-30, 3-30, 9-J-30.

Okla., Oklahoma City—City, L. M. Bush, City Engr., reported, plans 13,600 ft. of sewers, Virginia Ave. Sanitary Relief; cost \$70,000.

Okla., Tulsa—W. B. Carter, 7 N. Rockford St., Tulsa, has contract for storm sewers; cost \$10,218, H. A. Parker, City Engr.

S. C., Greenville—Greater Greenville Sewer Dist., reported, postponed opening of bids for sewers in North Gate Dist., Parker Dist., Augusta Rd. Dist., pending sale of bonds. 7-23

Tenn., Maryville—City voted \$20,000 sewer bonds; W. H. Willard, Judge. 7-23

Tex., Refugio—City votes Aug. 31 on bonds for sewers; Hawley, Freese & Nichols, Engrs., Frost Natl. Bank Bldg., San Antonio.

Va., Langley Field—Constructing Q. M. Ft. Monroe, receives bids Sept. 8 for storm water drainage system.

Va., Langley Field, Hampton—War Dept., Office of Constructing Quartermaster, receives bids Sept. 8 for storm drainage system for hangar and barracks area, Langley Field, See Want Section—Bids Asked.

Va., Petersburg—City Engr. Dept., working on plans for extension city sewerage system.

W. Va., Parkersburg—City, Myrtle L. Hoffman, City Clk., receives bids Aug. 11 for

storm sewer in alley and on 16th St. from 16th and Briant Sts. to intersection of 16th and Hoff Sts., etc., using vit. clay pipe, rein. conc. pipe and corrugated meta lpipe.

W. Va., Parkersburg—City, Allen C. Murdock, Mayor, receives bids Aug. 18 for sanitary sewer system, Dist. No. 1; Morris Knowles, Inc., Conslt. Engrs., Westinghouse Bldg., Pittsburgh, Pa. See Want Section—Bids Asked.

Telephone Systems

Ky., Owensboro—Voice of the Blue Grass applied to Federal Radio Comsn., Washington, D. C., for construction permit to erect new station.

Va., Langley Field, Hampton—Industrial Engr. & Con. Co., P. O. Box, 1912 Washington, D. C., reported, has contract for radio building at Langley Field for War Dept. 7-9

Va., Natural Bridge—Public Telephone & Telegraph Co., Lexington, reported, acquired controlling interest in Natural Bridge Mutual Telephone Co., serving Glasgow and territory surrounding Natural Bridge; plans improvements.

Textile Mills

Ark., Arkadelphia—C. E. McKeehan, Little Rock, and Chamber of Commerce, Arkadelphia, reported, interested in establishment of twine spindle and cotton yarn mill; citizens to subscribe \$12,000 stock; will require building 60x125 ft.; machinery purchased.

Ga., Rossville—Peerless Woolen Mills, reported, have plans nearing completion by W. H. Sears, Archt., James Bldg., Chattanooga, Tenn., for mill building; 3 stories, 300x100 ft., conc. foundations, struc. steel, brick walls, comp. roof.

N. C., Burlington—United States Capitol Corp., 185 Devonshire St., Boston, Mass., reported, will acquire control of Whitehead Hosiery Mills, Inc., and Mohawk Hosiery Mills, Inc.

N. C., Belmont—South Fork Mfg. Co., capital \$50,000, incorporated; S. P. Stowe, A. C. Lineberger, R. L. Stowe; manufacture yarns, cloths and textile fabrics.

N. C., Concord—Hoover Hosiery Mill, reported, installing full fashioned machinery in plant recently completed on Kerr St.

N. C., Concord—Concord Knitting Co. will resume operations of seamless hosiery plant; installing additional machinery.

N. C., Concord—Willis Hosiery Mills, Inc., installing machinery in recently completed building on Academy St.

N. C., Gastonia—Threads, Inc., capital \$250,000, incorporated; J. Gottlish, David Johnston, Jr.

N. C., Roxboro—James H. Craig, 43 Leonard St., New York, Pres. of John Watts Sons Co., Philadelphia, Pa., reported, removing Turkish towel, wash cloth and bath mat plant machinery from Philadelphia to addition recently completed at Somerset Mills. 5-28

Okla., Sand Springs—Sand Springs Textile Mills, reported, rebuilding No. 1 warehouse lately burned.

S. C., Anderson—Webb Electric Co., 118 W. Whitner St., Anderson, reported, has contract for re-wiring second story of Appleton Mills. 4-30

S. C., Arcadia—Stockholders of Arcadia Mills approved financing proposal submitted by Bd. of Directors. 7-16

S. C., Greenville—St. John Mfg. Co., Inc., P. O. Box 371, leased Dodge Bros. Bldg., making interior alterations; install low pressure steam heating system.

S. C., Ware Shoals—Cluett, Peabody & Co., Inc., Troy, N. Y., reported, plans manufacture of cotton into cloth and conversion and finishing and making of latter into shirts at plant of Ware Shoals Mfg. Co., through cooperative efforts of Cluett, Peabody & Co., Inc., and Ware Shoals Mfg. Co.; plant will be under management of Wm. L. Young, Troy, N. Y.

S. C., Whitmire—Aragon-Baldwin Cotton Mills, Chester, purchasing some card room machinery from Whitin Machine Works, Whitinsville, Mass., for plant at Whitmire. 6-18

Tenn., Chattanooga—Davenport Hosiery Mills, reported, has plans by Robert & Co., Inc., Engrs., Bona Allen Bldg., Atlanta, Ga., for erection of fourth story addition to 11 St. mill; cost \$100,000; 100x250 ft.; struc. steel; brick walls; tar and gravel roof; wood floors; sprinklers; steel sash, etc.; bids ready for distribution Aug. 25.

Tex., Port Neches—Carolina Cotton Mills, owned and operated by L. Banks Holt Mfg. Co., Graham, N. C., reported, acquired site on Beaumont Ship Channel near Port Neches for cotton mill. 8-6

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that Classification.

Ark., Magnolia—Agriculture and Mechanical College, C. A. Overstreet, Pres., reported, let contract to Layne-Arkansas Well Constr. Co., Stuttgart, for gravel wall and well and deep well pump; 23,000 gal. tank on 75 ft. tower to Pittsburgh-Des Moines Steel Co., Des Moines, Iowa. 6-11

Fla., Tampa—City, reported, let contract to American Cast Iron Pipe Co., Birmingham, Ala., for 4000 ft. of pipe.

Ga., Rome—George Odiorne, Clinton, S. C., reported, has contract at \$14,198 for water mains.

Md., Baltimore—Marocco Constr. Co., 231 S. Exeter St., low bidder at \$12,190 for water mains Ashburton Pumping Station. 7-30

Md., Cambridge—Dorchester Water Co., subsidiary of Pennsylvania State Water Corp., Washington, Pa., increasing capacity of plant, installing, 2 automatic turbine type pumps, with combined capacity of 2,304,000 gal. daily.

Mo., Huntsville—City defeated \$20,000 water works and \$4000 electric bonds; C. C. Johnson, City Clk. 7-30

N. C., Cayce—City, reported, voted \$36,000 water works bonds recently.

N. C., Sanford—Bd. of Aldermen authorized issuance of \$62,000 bonds for improvements to water works system, extending sewers, etc.

Okla., Oklahoma City—City, M. Peshek, Jr., City Clk., reported, rejected bids for pumping station on N. E. 26th St. between Lindsay Ave. and Phillips Ave.; corrugated sheet metal; 1 story; L. M. Bush, City Engr.; will soon call for new bids.

Tex., Canyon—City, Harvey Cash, City Sec., voted \$18,000 water works bonds. 7-16

Tex., Duncan Field—See Airports, Airplane Plants, etc.

Virginia—U. S. Dept. of Agriculture, Bureau of Public Roads, Washington, D. C., receives bids Aug. 27 for water supply at terminus of Mount Vernon Memorial Highway in Fairfax County near entrance to Mount Vernon Estate. See Want Section—Bids Asked.

Va., Portsmouth—Portsmouth Water Dept., W. L. Davis, Supt., preparing data for electrifying main pumping station; cost \$50,000.

Woodworking Plants

Ga., Toccoa—Forest Addition Branch, acquired and will rebuild and equip with modern machinery old Diana Furniture Factory; will operate.

N. C., Canton—Freel Furniture Co., capital \$20,000, incorporated; C. S. Freel, W. N. Freel.

N. C., Maiden—Campbell Mfg. Co., chartered; Frank B. Campbell, J. S. Campbell; furniture.

FIRE DAMAGE

Ark., Fort Smith—Frame building, part of Solid Steel Scissors Co., 2315 N. 15th St.

Ark., St. Joe—Plant of St. Joe Lime & Stone Co., owned by East Arkansas Lumber Co., Rector Bldg., Little Rock; loss \$50,000.

Ark., Blytheville—Ritz Theater, owned by O. W. McCutcheon; loss \$15,000.

Fla., Daytona Beach—T. T. McDonald's residence, Cairo St.

Fla., Graceville—Planing mill, dry shed, kiln and 3,500,000 ft. of lumber of Rex Lumber Co., W. D. McKee, Dothan, Ala., Propr.; loss \$125,000.

Fla., Jacksonville—Store of Houraney's Dry Goods Co., 219 W. Bay St.

Fla., Moore Haven—City electric light plant.

Ga., Atlanta—Building occupied by Horne Desk and Fixture Co., 55 Pryor St., N. E.; \$150,000.

Ga., Dawson—Fashion Store, Lee and Main Sts., occupied by George Saliba and owned by Beulah Farrar.

Md., Aberdeen Proving Ground—Field Service Warehouse No. 9 of Ordnance Dept.; loss \$10,000. Address Constructing Quartermaster.

Md., Nanticoke—Nanticoke Canning Co.'s plant.

Md., Princess Anne—Kersher Building occupied by De Leon Hatte Shop, E. R. Mullen, Dr. Thomas B. Whaley, Glen Phillips, also stores of American Stores Co. and Walton O. Bounds, and J. E. Morris; Delmarva Inn; loss \$75,000.

Md., Royal Oak—Barn, stables and cornhouse on farm of Mrs. Helen H. Smith, near Royal Oak.

N. C., Caroleen—General store of D. F. Beachboard.

N. C., Dunn—Building of J. P. Smith Chevrolet Sales Agency; loss \$50,000.

N. C., Rosemary—Sam Saddler's residence.

Okla., Muskogee—Dwelling, 16th and Emporia Sts., owned by J. R. Bond, Insurance Bldg., Oklahoma City; loss \$40,000.

Okla., Muskogee—Style Shop, M. A. Farha, Mgr.; loss \$10,000.

S. C., Gaffney—J. R. Wilson's residence.

S. C., Spartanburg—Five dwellings owned by estate of Mrs. Wallace Whitlock, Hayne Junction; loss \$10,000.

Tenn., Chattanooga—American Theater, operated by Independent Theaters, Inc., 245 E. Main St., Sam H. Borisky, Active Vice-Pres.; loss \$22,500.

Tex., Corsicana—Frost Enterprise newspaper and job printing plant; loss \$13,000.

Tenn., Martin—Billie Lee Inn, operated by W. L. Dildine.

Tex., Lockhart—Dry goods store of Sam Joseph; \$30,000.

Tex., Temple—W. S. Smith Building occupied by dry goods store of W. R. Berry; grocery of J. B. Martin, and Masonic Lodge; also W. W. Littlefield Drug Store building, and First State Bank; loss \$50,000.

Va., Altavista—Filling station of Sinclair Refining Co.

Va., Winchester—Dairy barn of John Harmer.

W. Va., Glenwood—H. E. Williams' residence, Princeton-Bluefield Rd. near Glenwood.

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

La., Ferriday—American Legion Bldg. Comm., Mayor E. W. Vogt, Chmn., soon call for bids for club house for Gray-McCearley Post, Texas Ave.

Tex., Arlington—Grand Chapter of Texas, Order of Eastern Star, Mrs. Stella C. Vodrie, 621 Van Ness St., opens bids Aug. 22 at Arlington for 2 wings to bldg., Women's Home; 2 stories, 40x87 ft. each, enlarge dining room and extend kitchen, 18x34 ft., rein. conc. frame, brick and struct. clay tile, tar and gravel built-up roof; \$70,000; Wilder & Smith, Archts., Texas Theatre Bldg.; L. D. Royer, Mech. Engr., Smith-Young Tower; Terrell Bartlett, Conslt. Engr., Smith-Young Tower, all San Antonio. 7-23

Churches

Fla., Daytona Beach—Negro Friendship Baptist Church has permit for \$10,000 conc. block bldg., site present structure, Cypress and Spruce Sts.; 2 stories, 80x55 ft., 2 towers; classrooms on first floor, auditorium above.

Fla., Jacksonville—St. Josephs Church, Rev. M. Pennell, Pastor, considers erecting club house.

Ga., Alpharetta—Methodist Church erect church and Sunday school; brick, conc. foundation, comp. roof; Chas. H. Hopson, Archt., Healey Bldg., Atlanta.

La., Carville—Catholic Church Extension Society of United States, Chicago, Ill., and Leper Home Chapel Society, Carville, have plans ready in about 2 weeks for \$50,000 chapel, U. S. Marine Hospital (National Home for Lepers), brick, cast stone trim, tile roof, cross shape, rein. conc. foundation, sheet metal, tile and marble, misc. steel, iron work; Wogan & Bernard, Archts., Canal Bank Bldg., New Orleans, La. 11-20

Md., Overlea—Baptist Church, Rev. H. G. Carlburg, Pastor, 4104 Overlea Ave., has low bid from Ralph Simmers, 4547 Harford Rd., for church and Sunday school; A. C. Leach, Archt., 2707 St. Paul St., both Baltimore. 7-9

Md., Westminster—Church of the Brethren, Rev. Geo. Early, Pastor, plans brick bldg.; 2 stories and tower, 45x80 ft.; Isaac Hoffer, Archt., Elizabethtown, Pa.; work start in Fall or Spring.

N. C., Winston-Salem—First Presbyterian Church, S. Clay Williams, Chmn., Bldg., erect addition to bldg., Cherry St.; \$150,000 gift already available.

Tex., Port Isabel—Methodist Church, Rev. E. C. Potts, has broken ground for Spanish type bldg.; frame and stucco, 1 story, 36x68 ft., conc. and tile floors, tile roof; F. H. Trimble, Archt., Brownsville.

City and County

Ala., Birmingham—Jefferson County Bd. of Commrs., W. D. Bishop, Chmn., erect brick and frame supt.'s residence, Jefferson County Alms House, Ketona; revising plans; rein. conc. foundation, 2 stories and basement, 73x42 ft., slate roof, oak, cement and tile floors, steam heat.

Fla., Kendall—Dade County Bd. of Commrs., W. E. Norton, advises neither additions nor new bldgs. planned in near future for County Home. 7-23

Ga., Darien—McIntosh County Bd. of Commrs. receive bids Aug. 18 for materials and labor for repairs and additions to court house; conc. foundation, brick and stone, 2 stories and basement, tar and gravel roof; Arthur F. Comer, Archt., Realty Bldg., Savannah. 7-2

La., Maringouin—City Council plans city hall; local bidders.

Tex., El Paso—City, Oscar J. Allen, Ch., Fire Dept., plans fire station.

Tex., Port Arthur—City, W. J. Gray, City Engr., may erect fire station, Delaware Drive section.

Tex., Port Arthur—Jefferson County, B. B. Johnson, County Judge, voted \$150,000 bonds for sub-court house at Port Arthur.

W. Va., Beckley—Raleigh County Bd. of Commrs. has low bid at \$78,300 from Mankin Lumber Co., Oak Hill, for Soldier and Sailor Memorial building.

Dwellings

Ala., Albertville—Hogan Jackson erect frame residence; 2 stories, 30x83 ft., asbestos roof, steam heat; Jesse W. Green, Archt., 718 Educational Bldg., Birmingham.

Ala., Girard—T. P. Cumbaa, care Cumbaa Boot & Shoe Shop, erect brick residence; 1 story, 6 rooms, hardwood floors, tile baths, comp. or asbestos shingle roof; Jas. J. W. Biggers, Archt., Murrah Bldg., Columbus, Ga.

Ala., Birmingham—Edw. W. Slater, Archt., 1300 N. Eighth Ave., completing plans for frame dwelling, Edgewood; 1 story and basement, 32x54 ft., comp. roof, furnace; has completed plans for frame dwelling, Springville Highway near Birmingham; 1 story and basement, 32x45 ft., tile bath, comp. roof, furnace.

D. C., Washington—Col. J. M. Wright has low bid from Skinner & Garrett, 1719 I St., N. W., for residence, Kalorama Circle, N. W.; Wyeth & Sullivan, Archts., 16 Jackson Place, N. W.

D. C., Washington—John E. McClure, Southern Bldg., has low bid from A. T. Newbold, 5626 Connecticut Ave., for residence, Chamberlain Ave., Kenwood; A. H. Sonnemann, Archt., 2400 16th St. 7-30

D. C., Washington—Frank D. Phillips, 1433 Shepherd St., N. W., has permit for brick and tile residence, 3101 Legation St.; 2 stories, \$10,000.

D. C., Washington—H. J. Schneider, 642 E St., N. E., has permit for \$12,000 residence, 5514 33rd St., N. W.; brick, 2 stories.

D. C., Washington—M. F. Burton, 2303 Rhode Island Ave., N. E., has permit for 2 dwellings, 2820-2818 Myrtle Ave., N. E.; wood and conc., 2 stories; total \$10,000.

Fla., Miami—Chas. C. Shorman, 139 N. E. First St., erect residence, 611 N. E. 23rd St.; rein. conc., conc. block and stucco, 2 stories, tile and oak floors, tile roof; Geo. Bruce, Archt., 518 Security Bldg.; bids in.

Fla., Miami Beach—W. N. Knapp, 4512 Alton Rd., erect \$25,000 residence, N. Bay Rd. and 5th St.; Carlos B. Schoeppl, Archt., 2382 N. Alton Road, Miami.

Fla., Quincy—I. G. Gardner erect tile and stucco residence; 2 stories and basement, tile and hardwood floors, tile roof, steam heat; Alvin R. Moore, Archt., Centennial Bldg., Tallahassee; completing plans.

Fla., Palm Beach—L. Trevette Lockwood Palm Beach Town Mgr., Cranesnest Way, West Palm Beach, erect \$15,000 Spanish type residence, Brazilian Ave.; 2-car garage; Marions Sims Wyeth, Archt.; Wyeth Bldg. drawing plans.

Ga., Atlanta—E. L. Guyol, 136 Cone St., N. W., erect brick veneer dwelling, Pelham Rd., Morningside; 2 stories and basement, 8 rooms, 3 baths, conc. foundation, hardwood and tile floors, comp. shingle roof, steam heat; J. M. Russell, Archt., Standard Bldg.

Ga., Columbus—Mrs. Ernest Phillips erect brick veneer residence, Oak Circle; 2 stories and basement, hardwood and tile floors, hot air heat; T. Firth Lockwood, Archt., Murrah Bldg.

Ga., Moultrie—Dr. H. H. Trimble erect brick veneer residence; 2 stories and basement, 15 rooms, 3 baths, tile roof, tile and hardwood floors, conc. foundation, steam heat; T. Firth Lockwood, Archt., Murrah Bldg., Columbus; completing plans.

Md., Bay Ridge, Annapolis—Miss Olive M. Long, 300 Rittenhouse St., N. W., Washington, D. C., plans cottage, Bay Ridge.

Md., Sweetair, Baldwin—Presbyterian Church erect 2-story stone and frame manse.

N. C., Charlotte—Sherwood Realty Co. has permit for \$10,000 dwelling, 2127 Sherwood Ave.; brick veneer, 9 rooms.

N. C., Raleigh—Wm. Proctor, Commercial Bank Bldg., has low bid at \$10,229 from J. W. Coffey & Son, 711 McCulloch St., for residence; Nelson & Cooper, Archts., 120½ S. Salisbury St.

Okla., Bartlesville—H. V. Foster about ready for bids for residence on 160-acre tract in Country Club district; Edw. Buehler Delk, Archt., Meyer Blvd. and Ward Parkway, Kansas City, Mo.

Okla., Bartlesville—Paul F. Dahlgren about ready for bids for residence, Country Club district; Edw. Buehler Delk, Archt., Meyer Blvd. and Ward Parkway, Kansas City, Mo.

Tex., Houston—W. Addison McElroy, 4407 Greeley St., has permit for brick veneer residence, 320 Reba St.; 9 rooms, \$10,000.

Tex., Houston—J. R. Tenison, 2131 Brentwood St., has permit for \$16,500 residence, 2947 Chevy Chase St.; brick veneer, 10 rooms.

Va., Alexandria—Miss R. Dunnington and Miss B. Norton, care Jos. A. Parks, Archt., 1800 E St., Washington, D. C., have low bid from Mr. Locknane, care M. H. Barry, 200 Arlington Ridge, Alexandria, for bungalow and studio; Jos. A. Parks, Archt., 1800 E St., Washington.

Government and State

Ala., Sylacauga—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., has low bid at \$49,950 from Adams Construction Co., Woodward Bldg., Washington, for post office.

Ark., Blytheville—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., selected site for \$70,000 post office.

Ark., Little Rock—Additional prospective estimators on \$1,435,000 Federal bldg., bids Aug. 17 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.; Fischer Cement & Roofing Co., 1115 E. Second St., Little Rock; Uhrich Millwork, Ltd. Independence, Kan.; Swenson Construction Co., Shubert Theatre Bldg., Kansas City, Mo.; Henry B. Ryan Co., 500 N. Dearborn St., Chicago.

Ark., Stuttgart—Additional prospective estimators on post office, bids Aug. 17 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.; J. B. Barrett, Stuttgart, Ark.; Fred R. Comb Co., 2113 Chicago Ave., Minneapolis, Minn.; Theriault Contracting Co., 534 E. Johnson St., Philadelphia, Pa.

D. C., Washington—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids in duplicate Aug. 27 for excavation and foundations for \$4,500,000 Department of Labor and \$4,750,000 Interstate Commerce Commission buildings, including preliminary excavation for connecting wing; Arthur Brown, Jr., Archt., 251 Kearny St., San Francisco, Calif. 5-14 and 2-19.

D. C., Washington—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., has low bid at \$823,899 from National Construction Co., 631 Tower Bldg., for constr. with ter-

aces, of Public Health Service Bldg.; J. H. DeSibour, Archt., 1200 15th St., N. W.

D. C., Washington—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids in duplicate Aug. 20 for preliminary excavation for \$8,700,000 Archives Bldg., Pennsylvania Ave., L. Seventh and Ninth Sts.; structure fireproof, stone, 7 stories; John Russell Pope, Archt., 542 Fifth Ave.; H. G. Balcom, Engr., 10 E. 47th St.; Clyde R. Place, Mech. Engr., 420 Lexington Ave., all New York.

Mo., Centralia—Additional prospective estimators on post office, bids Aug. 13 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.; S. M. Wilson & Co., Medical Bldg., Granite City, Ill.; Fred R. Comb Co., 2113 Chicago Ave., Minneapolis, Minn.; Hadley & Wisdom Construction Co., 100 E. Rollins St., Centralia; Stewart Bros., 802 Walnut St., Columbia, Mo.; McCarthy Bros. Construction Co., Roosevelt Bldg., St. Louis, Mo.; L. B. Pipes, Fort Scott, Kan.; Theriault Contracting Co., 534 E. Johnson St., Philadelphia, Pa.

Mo., Jefferson City—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., selected Egerton Swartwout, 10 E. 40th St., New York, and Klipstein & Rathmann, 316 N. Eighth St., St. Louis, Mo., as architects for \$600,000 Federal bldg., High and Washington Sts.

Mo., St. Louis—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., approved plans by Mauran, Russell & Crowell, Archts., Chemical Bldg., St. Louis, for \$3,000,000 post office and custom house, 12th and Market Sts.; white stone, 10 stories and mezzanine, 165 ft. high, set-backs at seventh and ninth floors, caisson foundation; probably let contract for sub-structure during 1931.

Mo., St. James—State Federal Soldiers Home having plans drawn by Wm. Ruggles Architectural & Engineering Co., St. James (lately noted St. Louis), for \$40,000 hospital to replace burned structure; fireproof, 1 story, 2-story tower, cross shape, 96 beds.

North Carolina—State Highway Comsn., E. B. Jeffress, Chmn., Raleigh, may erect frame prison camp in Wake County.

N. C., Rutherfordton—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., opens bids in duplicate Sept. 2 for post office, etc.; \$75,000; drawings from office Supvg. Archt.

Tex., Brownsville—Additional prospective estimators on post office, bids Aug. 14 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.; General Constr.—A. W. Neck & Co., Box 926; Homer L. Fitch, both Brownsville; John Erskine Construction Co., 33 N. LaSalle St., Chicago, Ill.; Raymond Concrete Pile Co., 140 Cedar St., New York; Elevators—Kimball Brothers Co., Ninth St. and 11th Ave., Council Bluffs, Iowa; Moffat Machinery Manufacturing Co., W. Third St., Charlotte, N. C.

Tex., Crockett—Prospective estimators on post office, bids in duplicate Aug. 18 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C.; Kellogg & Anderson, Sedalia, Mo.; Wentzel & Wood, Sherman, Tex.; Samford Bros., Inc., 301 Washington Ave., Montgomery, Ala.; Robert E. McKee, 1918 Texas St., El Paso, Tex.

Hospitals, Sanitariums, Etc.

Fla., Key West—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., has low bid at \$30,480 from O. P. Woodcock Co., Duval Bldg., Jacksonville, Fla., for extension and remodeling of U. S. Marine Hospital.

Ky., Lexington—United States Veterans Administration, Room 764, Arlington Bldg., Washington, D. C., receives bids in triplicate until Sept. 8 for recreation bldg. and officers' quarters, U. S. Veterans Hospital; work includes excavating, rein. conc. constr., hollow tile, brick work, architectural terra cotta, marble work, steel sash, iron and steel stairs with metal and slate treads, slate, metal and built-up roofing, roof ventilators, metal lathing, plastering, carpentry, metal weather strips, insect screen, window shades, painting, glazing, etc., and outside sewer, water, gas, steam and elect. service connections; drawings from Constr. Service, Room 764.

Tex., Houston—City of Houston and Harris County erect charity hospital, Buffalo Drive; Robt. J. Cummins, Engr., Bankers Mtg. Bldg.; \$1,500,000, including furnishings and equipment; rein. conc., brick, stone trim, 9 stories, dumb waiters, elect. refrigerators, elevators, terrazzo, rubber and mastic floors, incinerator, limestone, marble, metal doors, flat and hip roofing, steel sash and trim,

vaults, ventilators, wire glass, brass and bronze work; Alfred G. Finn and Joseph Finger, associated archts., 610 Bankers Mtg. Bldg., Houston; Dr. Christopher Parnall, Medical Consultant, Rochester, N. Y.; plans should be ready for bids in Sept.

Tex., Wichita Falls—State Bd. of Control, Claude D. Teer, Chmn., Capitol Bldg., Austin, probably open bids about Sept. 15 for surgical hospital bldg., Wichita Falls State Hospital; \$50,000, conc., wall bearing, 2 stories, 150x50 ft., ceramic tile, rubber tile and linoleum floors, conc. foundation, dumb waiters, elevators, comp. flat roof, metal interior door frames, sprinklers, steel sash and trim, vaults, vault lights; address proposals on equipment, etc., \$3000, to Dr. C. W. Castner at hospital; Ray C. Arnold, Archt., 910 Staley Bldg., Wichita Falls; drawing plans. See Want Section—Building Material and Equipment.

Hotels and Apartments

Ala., Birmingham—Commercial Realty Co., 2025 Comer Bldg., receiving bids; estimators and 23rd St.; E. B. Van Keuren, Inc., Archt., 1926 Fourth Ave., remodel hotel, Fifth Ave. include: W. S. Gilbert, 1517 Warrior St.; Brice Construction Co., 1 Woodward Bldg.; Marbury & Borris, M. C. Banks, 2501 First Ave., S.

Fla., Hialeah—Miami Racing Assn., Joseph E. Widener, Chmn. of Bd., Widener Bldg., Philadelphia, Pa., has plans in preparation for apartment building; Smith & Riddle, Inc., Supvg. Engrs., 210 Royal Palm Way; L. W. Geisler, Archt., 19 Via Parigi, both Palm Beach.

Ga., Atlanta—Sam Johnson, 429 Atlanta Trust Bldg., erect 6-unit apartment, 127 Jackson St., N. E.; 2 stories, frame, wood floors; comp. roof.

Ga., Columbus—J. B. Knight, Jr., 1331 Fourth Ave., erect 8-unit apartment building; 2 stories and basement, brick veneer, conc. foundations, slate roof, cast stone trim, orn. iron; concealed radiation; hardwood floors, tile baths; J. W. Biggers, Archt., Murrah Bldg.

Miss., Laurel—Edwin Hotel, P. D. Donnelly, Mgr., probably rebuild burned structure.

Mo., St. Louis—V. R. Appel, 7417 Oxford Dr., has permit for 2-story tenement, 4973 Potomac St.; 28x45 ft., tile roof, hot air heat; also for 1-story, 18x18-ft. garage; owner archt and builder.

Tenn., Maryville—A. M. Jenkins acquired Wildwood Springs Hotel; erect addition, dance pavilion, swimming pool, bathhouse.

Tex., Gilmer—J. M. Hays plans hotel.

Tex., Lampasas—B. C. Knight has contract for addition and alterations to Keystone Hotel.

Tex., Nacogdoches—J. Lowery, Mrs. F. R. Penman and F. P. Marshall erecting apartments.

Tex., San Antonio—Phelps & Dewees, Archts., Gunter Bldg., completing revised plans for apartment hotel for Swiss Plaza Co., Bldrs. Exch. Bldg.; probably start construction in Oct.; plans include air conditioning system.

Tex., San Benito—Elmer Morris soon let contract for apartment, Hicks and N. Brenham St.; frame and stucco.

Miscellaneous

Ala., Mobile—Bd. of Governors, Boys' Detention Home, Van Matthews, Supt., acquired property for future expansion.

D. C., Washington—Porter & Lockie, Architects Bldg., preparing plans for Young Women's Christian home; 76x121 ft., brick and stone.

Florida (Walton and Okaloosa counties)—Gen. Albert Clay Dalton, Va., and Highland Apts., Washington, D. C., reported, accepted presidency of Port Dixie Corp., J. M. Hodgskin, Vice-Pres., care of Mallie Martin, Crestview, reported, soon start work on first unit of \$17,000,000 development project; includes docks, warehouses, terminal yards, industrial sites, and residential facilities; Jesse Lee Spencer, New York, to be active vice-president; Wm. C. Jenkins, Germantown, Pa., secretary-treasurer, with headquarters at Crestview.

Fla., Miami Beach—Robert A. Taylor, Archt., Espanola Way and Penn Ave., preparing for additions to Cabana Sun Club, Inc., Roney Plaza Hotel; 163 cabanas, two swimming pools, stores; \$300,000.

Md., Woodlawn—C. W. Roes, 119 Clarendon Ave., Pikesville, Md., have plans ready about Sept. 1 for two dairy barns, two silos and remodeling barn; masonry and frame.

Md., South River—District of Columbia Women's Democratic Educational Council, Mrs. Clara Wright Smith, Pres., Washington, plans clubhouse, at Woodland Beach, on South River.

Tex., San Antonio—Swiss Plaza Co., Bldrs. Exch. Bldg., reported, erect club building; Phelps & Dewees, Archts., Gunter Bldg.

Hotels and Apartments

Fla., Miami Beach—Pancoast Hotel, Collins Ave., erect building; 3 storerooms on first floor, one apartment and nine hotel rooms on second floor; rein. conc. block, stucco, terrazzo and tile floors; Russell Pancoast, Archt., Lincoln Rd.

Railways Stations, Sheds, Etc.

Ala., Elyton—Atlanta Birmingham & Coast R. R. Co., L. L. Beall, Ch. Engr., Atlanta, Ga.

Schools

Ala., Autaugaville—Hicks Memorial Schools, C. E. Ray, Principal, let contract about Sept. 1 for 10-room and auditorium school; brick, or brick veneer.

Ala., Auburn—Pi Kappa Alpha Fraternity, J. E. H. Jenkins, receiving bids for fraternity house; 1 story and basement, 118x85 ft., brick veneer, conc. foundations, hardwood and tile floors; estimators include: E. C. Coston; Smallman-MacQueen Construction Co.; D. T. Underwood Co., all Birmingham; Algernon Blair, Montgomery; W. L. Coston, Bessemer; Warren, Knight & Davis, Archts., Protective Life Bldg., Birmingham.

D. C., Washington—District Commissioners, Roland M. Brennan, Chief Clerk, has low bid of \$45,787 from Lach Construction Co., Munsey Bldg., Baltimore, for gymnasium at Randall Junior high school; A. L. Harris, Municipal Archt. 7-30

D. C., Washington—Georgetown University, Rev. Dr. D. W. Coleman Neville, Pres., plans library, 35th and Reservoir Rd., N. W.

D. C., Washington—Commissioners, District of Columbia, 509 District Bldg., open bids Aug. 20 for addition and alterations to Paul Junior High School, between Eighth, Ninth, Peabody and Concord Ave., N. W.; 570,000 cu. ft. space; plans from Room 427, District Bldg.

D. C., Washington—Commissioners, District of Columbia, have low bid of \$167,000 from Lee Paschall, American Natl. Bank Bldg., Richmond, Va., for 10-classroom and gymnasium addition to Macfarland Junior high school; A. L. Harris, Municipal Archt. 7-30

Ga., Rome—Bd. of Education, Sam King, City Mgr., opens bids Sept. 4 for Eighth Ward elementary school; 1 story and basement, brick, conc. foundation, comp. roof; Lockwood & Poundstone, Archts., 101 Marietta Bldg., Atlanta.

Ga., Soperton—Gillis Springs School, R. R. Horton, erect 8-classroom and auditorium building; 1 story and basement, brick veneer, comp. roofing.

Ky., Lexington—University of Kentucky, Maury J. Crutcher, Supt. of Buildings and Grounds, install sprinkler system, Boyd Hall; G. C. Wilcoxen, Contr.

La., Bordelonville—Avoyelles Parish School Bd., Marksville, receives revised bids Aug. 25 for school; Wm. T. Nolan, Archt., Canal Bank Bldg., New Orleans. 7-9

La., Dupont—Avoyelles Parish School Bd., Marksville, on Aug. 25 will probably award contract at \$12,901 for school; Wm. T. Nolan, Archt., Canal Bank Bldg., New Orleans. 7-9

La., Marrero—A. S. Montz, 740 Poydras St., New Orleans, have plans ready about Sept. 1 for 2-story, 94x145-ft. school at Hope Haven; rein. conc. foundation, brick and stucco, built-up comp. roof, steel sash, cast stone.

La., Simmesport—Avoyelles Parish School Board, C. E. Laborde, Sec., Marksville, have plans ready about Aug. 15 for brick addition to 1-story school; \$20,000 bonds voted; Wm. T. Nolan, Archt., Canal Bank Bldg., New Orleans.

Md., Arnold—Anne Arundel County School Commrs., George Fox, Sec.-Treas., have plans under way by W. H. Emory, Jr., Baltimore Trust Bldg., and Buckler & Fenhagen, 325 N. Charles St., both Baltimore, for brick school.

Md., Baltimore—Board of Public Improvement Commission, H. J. Leimbach, Supvg. Engrs., approved sketches of Mackenzie &

Cross, 415-16 Professional Bldg., for school for handicapped children, Wheeler, Warwick and Windsor Aves., near North Ave.; hollow square, 250x300 ft., 1- and 2 stories; brick; conc. floors; part slate and part built-up roof; steel roof framing; go out for bids in about 4 months; Reeder, Iser & Akers, Mech. Engr., 916 N. Charles St.; Henry Massart, Struc. Engr., 328 N. Charles St. 8-6

Md., Baltimore—Board of Public Improvement Commission, H. J. Leimbach, Supvg. Engr., erect school for handicapped Negro children, Franklin and Schroeder St.; brick and stone; William F. Stone, Archt., 2612 N. Charles St.; plans not started; Van Rensselaer Saxe, Struc. Engr., 217 N. Calvert St.; Henry Adams, Inc., Mech. Engr., Calvert Bldg. 8-6

Md., Owensville—Anne Arundel County School Commrs., George Fox, Sec., Annapolis, probably receive bids by Sept. 1 on 2-classroom and assembly room school; W. H. Emory, Jr., Baltimore Trust Bldg., and Buckler & Fenhagen, 325 N. Charles St., both Baltimore, associated architects. 7-30

Md., Pomomkey—Charles County School Commrs., La Plata, erect 4-room school; J. M. Armstrong, Archt., 35 Franklin St., Annapolis.

Md., Rockville—Montgomery County Bd. of Education, Edwin W. Broome, Supt. of Schools, opens bids Aug. 18 for second unit of elementary school, Rosemary St.; \$90,000, 6 classrooms, assembly hall, gymnasium. 7-23

Miss., Ellisville—City erect \$20,000 school. Okla., Pryor—State Bd. of Affairs, W. C. Hughes, Chmn., has final plans under preparation by J. J. Walsh, McAlester, for \$40,000, boys' dormitory, Whitaker State Home; 2 stories, brick, rein. conc. and steel.

Tenn., Chattanooga—University of Tennessee, Stanley Johnson, Sec., open bids Aug. 27 for alumni memorial physical education building and gymnasium; separate proposals on general, plumbing, heating, ventilating and electrical contracts; Barber & McMurtry, Archts., General Bldg., Knoxville.

Tenn., Nashville—State Funding Board opens bids Aug. 20 on \$500,000 bonds for continuation of building program at University of Tennessee.

Tex., Austin—State Board of Control, Claude D. Teer, Chmn., probably have plans completed Aug. 15 by H. F. Kuehne, Littlefield Bldg., for 2-story dormitory, Austin State School for Feeble-minded; rein. conc., brick and struc. clay tile; insulation, stone trim, built-up roof; \$50,000. 7-23

Tex., Brownsville—Brownsville Independent School District have plans complete about Aug. 15 for administration building, Ninth and Adams St.; 1-story, 5 rooms, struc. clay tile, rein. conc. foundation; tile and oak floors; William D. Van Sicken, Archt.; also have plans ready about Aug. 15 for \$20,000 elementary school; 1-story, 6 rooms, struc. clay tile and stucco; E. H. Trimble, Archt., Merchants Bank Bldg. 7-30

Tex., College Station—Texas Agricultural and Mechanical College have plans ready about Aug. 15 for general and mechanical contracts on \$350,000 chemistry building; 3 stories and basement, brick, struc. clay tile, struc. steel, rein. conc.; F. E. Giesecke, college archt.; L. D. Royer, Mech. Engr., Smith-Young Tower, San Antonio. 7-30

Tex., San Antonio—Board of Education having sketches prepared by following architects for \$750,000 school work: Includes 2-room brick and rein. conc. addition to Herff School No. 18, Ellis Albaugh, Real Estate Bldg.; 6-room rein. conc. and brick addition, Agnes Cotton School No. 20, Richard Vander Straten, Travis Bldg.; second story, 4-room brick and rein. conc. addition to William McKinley School No. 29, Olin Boese, Bldrs. Exch. Bldg.; 4-room and cafeteria, brick and rein. conc. addition Robert E. Lee School No. 30, George Willis, Bldrs. Exch. Bldg.; brick and rein. conc. addition, Eleanor Brackenridge School No. 16, Atlee B. and Robert M. Ayres, Smith-Young Tower; 2-story, 8-room, brick and rein. conc. elementary school, Durango, 21st Sts., and San Luis Ave., Emmett T. Jackson, Bldrs. Exch. Bldg.; 2-story, 4-room brick and rein. conc. elementary school, Dawson, Gulf and Rio Grande and Rosary Sts., Ralph H. Cameron, Majestic Bldg.; 2-story, 6-room brick and rein. conc. elementary school, Waverly and Kentucky Aves., Wooley and Emory Sts., Fred B. Gaenslen, 927 Navarro St.; 2-story, 6-room brick and rein. conc. elementary school, Highland Park, Bartlett Cocke, Maverick Bldg.; Phelps & Dewees, School Archts., Gunter Bldg.; L. D. Royer, School Mech. Engr.

Tex., San Marcos—Southwest Texas State Teacher's College, C. E. Evans, Pres., erect \$30,000 gymnasium to replace burned structure; 150x100 ft.; W. E. Ketchum, Archt., Austin.

Va., Dan River—Pittsylvania County, F. B. Watson, Div. Supt., Chatham, receive revised bids on high school.

Va., Tazewell—Tazewell County, A. S. Greever, Supt. of Schools, have plans ready about Sept. 1 by Division of School Buildings, State Department of Education, Richmond, for following schools: North Tazewell, 8 rooms and auditorium, elec., heating, plumbing; Bishop, 8 rooms and gymnasium, heating, plumbing, elec. work; Tazewell, 12 rooms and gymnasium, heating, plumbing, elec. work.

Va., Whitwell—Pittsylvania County, F. B. Watson, Div. Supt., Chatham, receive revised bids on high school. 7-23

W. Va., Wheeling—Bd. of Education, Independent School Dist. of W. Va., Wheeling, tentatively plans grade school, Tenth and Chapline Sts.; architect not selected.

Stores

D. C., Washington—Witt & Mirman, 1117 F St., S. W., erect \$80,000 store, 433-37 11th St. and 1101-1107 E St., S. W.; 2 stores, conc. and brick.

Fla., Miami Beach—Watson and Garris, Hill Bldg., Miami, have plans for store building, 1421 Washington Ave.; rein. conc., 50x20 ft.

Fla., St. Augustine—M. I. Pincus, 110 Bridge St., erect business block, Treasury and St. George St.; clearing site.

La., New Orleans—Following additional subcontractors on Feibleman Store, Baronne and Common Sts., B. W. Construction Co., Gen. Contrs., 938½ Common St.; Misc. Iron, James R. Sutton, 4107 Elba St.; plastering, Jacobson Plastering Corp., 816 Howard Ave.; aluminum and bronze, Pittsburgh Plate Glass Co.; building material, Jahncke Service, Inc., 814 Howard Ave.; roofing, J. J. Clarke Co., Ltd., 1601 Julia St.; lumber, Madison Lumber Co., 721 S. Claiborne Ave.; millwork, Riecke Cabinet Works, 4201 Tulane Ave.; glazing, Pittsburgh Plate Glass Co., 314 Girod St.; rein. steel, Jos. T. Ryerson & Son, Inc., 2558 W. 16th St., Chicago, Ill.; Moise H. Goldstein, Archt., American Bldg. 5-28

La., New Orleans—Moise H. Goldstein, Archt., American Bank Bldg., announces postponement of remodeling Ladin Store, 733 Canal St.

La., New Orleans—Weiss, Dreyfous & Seifert, Maison Blanche Bldg., soon have plans ready for remodeling lower floor of Cotton Exchange Bldg., Carondelet and Gravier Sts., for drug store of Katz & Besthoff, Ltd., 523 Bienville St.

Md., Baltimore—Harry Joffrey make store and apartment alterations, 4605 Eastern Ave.; J. C. Spedden, Archt., 2715 Harlem Ave.

Md., Baltimore—Cummins Brothers, through Abe Bennett & Co., 2010 E. Fairmount Ave., leased building, 17 N. Eutaw St.; remodel, to be occupied by luncheon of Jacob Amolsky.

Md., Baltimore—Oriole Cafeteria, Inc., Henry R. Dunnock, Pres., 22 Light St., leased building, 11-13 E. North Ave.; improve for cafeteria.

Md., Towson—Crown Five and Ten Cent Store, 3207 Greenmount Ave., erect store; David Harrison, Archt., 3735 Reisterstown Rd.

Mo., St. Louis—Jos. Tenise, 2315 Cooper St., has permit for 2-story store and dwelling, 2241 Edwards St.; 30x48 ft., comp. roof; owner builds.

Tenn., Chattanooga—S & W Cafeteria, Frank O. Sherrill, 1115 Johnson Bldg., Charlotte, N. C., make alterations and additions to building, 823-5 Market St., for cafeteria; new front, interior changes; H. M. Miller, Archt., Shenandoah Life Bldg., Roanoke, Va.

Theatres

Ark., Blytheville—O. W. McCutcheon repair fire damage to Ritz Theater; \$15,000.

D. C., Bolling Field, Anacostia—Constructing Quartermaster erect theatre and gymnasium building.

La., Abbeville—R. J. Montague rejected bids on New Frank's Theater; owner to do work by sub-contract; 50x121 ft.; \$25,000 to \$30,000; Charles Davis, Archt., 1204 Jackson Ave., New Orleans.

Md., Baltimore—Sound Amusement Corp., care Wilson P. Smith, Archt., American Bldg., make alterations to building, 614-18 N. Gilmer St.; brick, 1 story, fireproof.

N. C., Charlotte—Charlotte Drama League, Mrs. C. T. Wanzer, Pres., 19 Briarwood Rd., plans \$25,000 theater; Walter W. Hook, Archt., Commercial Bank Bldg.

Tenn., Chattanooga—Independent Theaters, Inc., 245 E. Main St., Sam H. Borinsky, Active Vice-Pres., plans rebuilding burned American Theater.

Tex., Dallas—H. N. Jorgensen, 810 Monto Vista Drive, rebuild East Grand Theatre, East Grand Ave., near Graham St.; \$25,000; re-equip to seat 800 persons; built-in stage; install sound equipment, smoking rooms, W. Scott Dunne, Archt., Melba Bldg.

Warehouses

D. C., Washington—Following contractors estimating on \$1,000,000 Federal warehouse, Seventh, Ninth, C and D Sts., bids received Aug. 28 by Office of Public Buildings and Public Parks, Lt. Col. U. S. Grant, III, Director, 1031 Navy Bldg.; Boyle-Robertson, Inc., Evans Bldg.; Fred Drew Co., Inc., 2539 Pennsylvania Ave., N. W.; Maistaco Construction Co., 805 Fifth St., N. W.; Charles H. Tompkins Co., 1608 K St., N. W.; George E. Wyne, 2539 Pennsylvania Ave., N. W.; George A. Fuller Co., Munsey Bldg.; George Hyman Construction Co., 1010 Vermont Ave.; Skinker and Garrett, 1719 Eye St., N. W.; Robert A. Moyer, 3409 Quebec St., N. W.; John W. Cowper Co., 843 National Press Bldg., all Washington; S. M. Siesel Co., 502

Flannery Bldg., Pittsburgh, Pa.; J. Henry Miller, Inc., Eutaw and Franklin Sts.; Consolidated Engineering Co., Inc., St. Paul and Franklin Sts.; North Eastern Construction Co., 6 W. Madison St.; The M. A. Long Co., 10 W. Chase St.; P. C. Streett Engineering Co., 404 St. Paul St., all Baltimore; Henry J. Speiker Co., Elm & Utica Sts., Toledo, Ohio; Agostini Brothers, 205 E. 42nd St.; F. H. McGraw & Co., 51 E. 42nd St., both New York; Cramp & Co., Denckla Bldg.; Hughes-Foulkrod Co., Schaff Bldg.; Turner Construction Co., 17th and Sampson Sts.; Ralph S. Herzog, 10 S. 18th St.; McCloskey & Co., 1620 Thompson St., all Philadelphia, Pa.; Lee Paschall, American Natl. Bank Bldg., Richmond, Va.; The H. R. Blagg Co., 1229 E. Third St., Dayton, Ohio; Murch Brothers Construction Co., Railway Exchange Bldg., St. Louis, Mo.; The Hunkin-Conkey Construction Co., Cleveland, Ohio; Edward S. Moore and Sons, 610 N. Washington St., Kokomo, Ind.; B-W Construction Co., 720 N. Wabash Ave.; Fleisher Engineering Co., 410 N. Michigan Blvd., Chicago, Ill.; Northern Virginia Construction Co., Clarendon, Va.; \$1,000,000; building, 7 stories and basement, 212x252 ft., rein. conc., flat built-up roof, conc., terrazzo and comp. floors, conc. foundation spread footings, cast stone, elevators, steel sash, hollow tile, ventilators, wire glass, incinerator, marble, metal doors, sprinklers, brass and bronze work; Lockwood Greene Engineers, Inc., Const. Engrs., 100 E. 42nd St., New York. 8-6

D. C., Washington—Schwab & Valk, 1704 Connecticut Ave., erect 2 dwellings, 4505 Klinge St. and 3100 45th St.; 2 stories, brick, slate roofs, hot water heat; total \$26,000; owners build.

D. C., Washington—A. T. Newbold, 5626 Connecticut Ave., N. W., has permit for \$14,000 residence, 4507 Klinge St., N. W.; stone and brick, 2½ stories.

D. C., Washington—Cafritz Construction Co., 404 K St., N. W., has permit for 11 brick dwellings, 5000-20 Fourth St., N. W.; 2 stories; total \$77,000.

D. C., Washington—L. E. Breuninger & Son, Investment Bldg., have permit for \$10,000 dwelling, 7528 Morningside Drive, N.W.; brick, 2 stories; owners build.

D. C., Washington—W. Walter Vaughn, 12th and Upshur Sts., N. W., have permit for 2 brick and cinder block dwellings, 1000 Upshur St., N. E., and 4303 Tenth St., N. E.; 2 stories; total \$14,500.

Fla., Hallandale—Vincent J. Farley, care 117 W. 61st St. Company, New York, start work at once on residence and garage, Hallandale Beach; John N. Bullen, Archt., Bastian Bldg.; Arthur H. Higgins, Contr., both Miami Beach.

Fla., Miami—Jens P. C. Nielsen, 55 N. E. 46th St., erect residence and garage, 8807 S. W. Fifth St.; masonry, 1-story, 35x50 ft., hardwood and tile floors, conc. foundation, asbestos shingle roof, cast stone; owner builds; foundations in; Chas. P. Nieder, Archt., 711 Meyer-Kiser Bk. Bldg.

Fla., Miami Beach—J. Goode Hundley, 1661 Alton Rd., erect \$15,000 rein. conc., conc. block and stucco residence and garage, Pine Tree Drive near 50th St.; G. J. P. Jacques, Archt., 609 Collins Ave.; probably start work during Sept.; Thos. C. Taylor, 737 N. Greenway Drive, Coral Gables, and E. P. Fris, 101 N. E. 87th St., Miami, estimating.

Fla., Palm Beach—L. Travette Lockwood, Palm Beach Town Mgr., erect \$13,000 residence, Brazilian Ave., Palm Beach; type of constr. not determined; sketches; 2 stories, rein. conc. foundation, Cuban tile roof; Marion Sims Wyeth, Archt., Wyeth Bldg.; Harry R. Corwin & Co., Contrs., Hibiscus Ave., both Palm Beach.

Ga., Atlanta—Chas. E. Arnold, care Bradley Stucco Tint Co., 307 Mtg. Guar. Bldg., erect struct. steel and brick residence, North Side; 1 story and basement, conc. roof slab, Naillcrete, hardwood and tile floors, slate, steel sash, steam heat; owner builds.

Ga., Atlanta—V. S. Beem, 515 Atlanta Trust Bldg., erect brick veneer residence, 1147 Reeder Circle, N. E.; 1 story, wood floors, comp. roof, hot air heat; owner builds.

Ga., Atlanta—C. A. Meriweather, 2554 Peachtree Rd., N. W., let contract to Christian & Bell, Red Rock Bldg., for brick veneer residence, Garden Hills; 1 story and basement, conc. basement, hardwood and tile floors, comp. shingle roof.

Ga., Atlanta—W. F. Kinney, 1655 Flat Shoals Ave., erect 1-story frame residence, 1671 Flat Shoals; comp. roof, wood floors; owner builds.

Ky., Lexington—Dr. F. Earl Williams, Phoenix Hotel, started work on stone veneer residence, Sycamore Rd.; 2 stories, 7 rooms; stone from site; Wayne W. Haffner, Archt., 427 W. Second St.; Skinner Bros., Contrs., 361 E. Main St.

La., New Orleans—Geo. J. Stoll, 2510 Eads St., has contract for dwelling, Metairie Ridge.

Md., Annapolis—Herbert G. Stockwell let contract to Ralph MacMurray, 39th St. and Old York Rd., Baltimore, for brick veneer and terra cotta residence, Wardour; 1 story, 72x36 ft., slate roof, vapor heat; Henry Powell Hopkins, Archt., 10 E. Mulberry St., Baltimore. 7-2

Md., Baltimore—Harry E. Burgan, 617 S. Ellwood Ave., erect 1½-story residence and garage, 4905 Arabia Ave.; 24x33 ft. and 19x19 ft.; Milton R. Lerch, Contr., 5206 Harford Road.

Md., Baltimore—John L. Zeman, 6714 Philadelphia Road, erect brick residence, 4405 Walther Blvd.; 1½ stories, 28x40 ft.; Milton R. Lerch, Contr., 5206 Harford Rd.

Md., Baltimore—L. Dudley Miller, 3113 St. Paul St., erect brick residence, Upnor Rd.; 2½ stories, 37x26 ft.; Wrenn, Lewis, Westernhaver & Jencks, Archts., Title Bldg.; Harry E. Page, Contr., 327 E. 30th St.

Md., Loch Raven—Gunn, Williamson & Guy, Inc., 306 N. Charles St., have contract to erect Colonial type dwelling, Hampton; stone, 12 rooms, 3 baths; Wrenn, Lewis, Westernhaver & Jencks, Archts., Title Bldg., both Baltimore.

N. C., Hereford—Silas M. Whedbee erect frame residence; 2 stories, 8 rooms, 2 baths, pine, oak and tile floors, asbestos shingle roof; Ye Planry, Inc., Archt., 1713½ Live Oak St., Dallas, Tex.; day labor.

BUILDING CONTRACTS AWARDED

Bank and Office

Ala., Birmingham—Birmingham Slag Co., Comer Bldg., let contract to E. C. Coston Construction Co., 3019 Avenue F, for office bldg., Sixth Ave., North; rein. conc., brick, cast stone trim, 1 story and basement, 40x100 ft.; Warren, Knight & Davis, Archts., Protective Life Bldg. 7-18

Fla., Miami Beach—City Bank of Miami Beach, remodel and erect second story of bldg., Seventh St. and Washington Ave.; work started; 2 stories, 50x70 ft., conc. foundation, tile roof, \$17,000; furnishings, equipment, etc., \$2800; Dick Belsham, Engr., Miami; Alex. Lewis, Archt., Lincoln Rd. Patio; Wm. S. Green Co., Contr., 1237 Twentieth St., both Miami Beach.

Tex., Dallas—Morris Plan Bank, J. B. Adoue, Jr., Pres., erect limestone and black marble bank bldg., Commerce and Murphy Sts.; 1 story, 40-ft. main banking room; Flint & Broad, Archts., Melba Bldg.; J. O. Everett Co., Contr., 1713½ Live Oak St.

Churches

Ga., Atlanta—Calvary Baptist Church, Dr. A. N. Adams, Chmn., Bldg., Comm., Riley Bldg., Buckhead, has low bid at \$10,225 from C. R. Justi, 101 Marietta St., N. W., for church and Sunday school; N. Sargent Hamilton, Archt., 1111 Peachtree St., N. E. 7-30

Tenn., Chattanooga—Marr Memorial Chapel, Signal Mountain, gift of Walter L. Marr; contract let to Mark K. Wilson Co., 730 Power Bldg.; \$35,000; ordinary type, brick, 2 stories, 50x88 ft., steel truss, conc. and hardwood floors, slate roof, conc. foundation, limestone, plaster board, asbestos shingle and slate hip roof, steel sash and trim; furnishings, equipment, etc., \$10,000; Wm. Crutchfield, Archt., 929 First Natl. Bk. Bldg. 8-6

City and County

Ga., Macon—Bibb County Bd. of Commrs. let contract to W. A. Stilwell & Son, Grand Bldg., for \$25,000 convict camp; brick, stone trim, conc. and steel, 2 stories and basement, T shape, 39x90.6 ft., conc. floors and foundation, built-up roof, cast stone, dumb waiters, tile flooring, metal doors, steel sash and trim, ventilators; dormitory and machine shop; E. Elliott Dunwoody, Jr., 460 Broadway, and Cecil C. Hays, Grand Bldg., Asso. Archts. 7-30

Miss., Greenville—Washington County Bd. of Supvs. let contract to Shaw Lumber Co., Shaw, to remodel jail and erect annex; \$10,000; H. W. Lathrop, Archt., Greenville. 7-16

N. C., Graham—City Council plans fire station.

Tex., Hamilton—Hamilton County Bd. of Commrs., P. M. Rice, County Judge, let contract at \$55,754 to J. C. Ray, San Saba, to remodel and erect two 3-story wings to court house; native stone, brick, tile, struct. steel and rein. conc., metal lath and plaster, weatherstrips, steel stalls, wood and tile floors, asbestos shingle and pitch gravel roof; E. M. Mills, Archt., 511 First Natl. Bank Bldg., Brownwood. 7-9

Tex., Wellington—Gullyford Co., has plumbing and heating contract at \$10,760 for \$125,000 Collingsworth County court house; elect. work, Broome Electric Co., 112 W. Sixth St., at \$6185; Berry & Hatch, Archts., Oliver-Eagle Bldg., all Amarillo; Christy-Dolph Construction Co., Contr., Construction Bldg., Dallas. 8-6

W. Va., Clarksburg—Harrison County Court, Maurice L. Lounin, Clk., reported, receives bids Aug. 31 for \$700,000 courthouse; fireproof, 110x130 ft., 6 stories, rein. conc., struct. steel, brick, tile, stone, trim; Walker & Weeks, Archts., 11001 Euclid Ave., Cleveland, O.; Carleton C. Wood, Asso. Archt., Lowndes Bldg., Clarksburg. 7-9

Dwellings

Ala., Birmingham—W. W. French, 1313 S. 31st St., erect painted brick veneer residence, Mountain Brook Estates; 2 stories and basement, 34x39 ft., comp. roof, hot air heat; Denham & Denham, Archts., Comer Bldg.; Geo. Paul, Contr., 2337 S. 20th Ave.

Ala., Opelika—J. M. McGuillian, care Opelika Motor Co., erect brick residence, Alta Vista; Eucl Screws, Contr.

D. C., Washington—Sam Eig, 5704 Georgia Ave., erect 2 brick, stone, cinder block and frame dwellings, 6814-10 Ninth St., N. W.; 2 stories, slate roofs, hot water heat; total \$16,500; plans by F. G. Wilcox; owner builds.

D. C., Washington—H. J. Schendler, 642 E St., S. E., erect \$12,000 residence, 5515 33rd St., N. W.; brick and hollow tile, 2 stories, slate roof, hot water heat; Gore Co., Contr., 5211 Wisconsin Ave., N. W.

D. C., Washington—Douglass Construction Co., 1621 K St., N. W., erect 7 brick and hollow tile dwellings, Second St. near Kennedy St.; 2½ stories; total \$55,000; owner builds.

D. C., Washington—Jos. A. Shaffer, 6712 Wisconsin Ave., erect 2 brick and frame dwellings, 6216-20 32nd St.; 2½ stories; owners build.

D. C., Washington—E. M. Willis, Tower Bldg., erect 3 brick and frame dwellings, 5401 Nevada Ave. and 3511-15 Legation St., after plans by Geo. T. Santmyers, Archt., 925 15th St., N. W.; 2 stories, slate roof, hot water heat; total \$25,000; owner builds. 8-6

D. C., Washington—Jefferson Patterson erect brick residence, 10 Thompson Circle; 2 stories, comp. roof, vapor heat; Geo. N. Ray, Archt., 1223 Connecticut Ave., N. W.; F. M. McConihe & Co., Contrs., 714 Jackson Place, N. W.

D. C., Washington—Zimmerman & Dismar, 805 H St., erect 9 brick dwellings, 1342-54 V St. and 2099-11 15th St., S. E.; 2 stories, tin roof, hot water heat; total \$36,000; Benton & Miller, Contrs.

D. C., Washington—Chas. G. Spicknall, 832 Rittenhouse St., N. W., erect 2 brick dwellings, 5826 Third St., N. W., and 300 Oglethorpe St.; 2 stories, tin roofs, hot water heat; total \$15,000; Geo. T. Santmyers, Archt., 925 15th St., N. W.; owner builds.

N. C., Richlands—J. W. Taylor erect \$12,000 residence; let contract in about 3 weeks; brick and frame, 12 rooms, slate roof; Leslie N. Boney, Archt., Wilmington; Archt. also drawing plans for \$2500 store; brick and frame, 1 story, 22x60 ft., comp. roof, plate glass and copper front; contract in about 3 weeks.

N. C., Wilmington—H. B. Peschau erecting \$20,000 residence, Masonboro Sound; 10 rooms, brick and frame, 2 stories and basement, 36x52 ft., conc. foundation, comp. roof, cast stone, elect. refrigerators, hardwood and tile floors, marble, asphalt shingle hip roof; Leslie N. Boney, Archt., Murchison Bldg.; W. A. Simon, Contr., Odd Fellows Bldg.

Okl., Bartlesville—H. V. Foster let contract to Long Construction Co., Philtower Bldg., Tulsa, Okla., for \$75,000 brick and stone residence on 2500-acre ranch near Bartlesville; 2 and 3 stories; Keene & Simpson, Archts., 1005 Land Bk. Bldg., Kansas City, Mo.; constr. under way under supervision of A. R. Gilliland, Dewey, Okla., on roads, 60-acre lake, 45-acre lake, ponds, etc. 7-30

Tex., Houston—River Oaks Corp., River Oaks Bldg., has permit for \$15,000 dwelling, 2915 Chevy Chase St.; brick veneer, 9 rooms.

Tex., San Antonio—F. G. Saunders started work on English type residence, 1319 Fulton Ave.; 6 rooms, cut limestone, tile roof; V. F. Buchek & Co., Contrs., 1525 W. Mulberry St.

Va., Norfolk—Coburn Hardy Realty Co., erecting \$10,000 dwelling, Shaw Place, Lakewood.

Government and State

D. C., Washington—Architect of The Capitol, David Lynn, let contract to Steven & Son Co., 729 15th St., N. W., to resurface and point granite, Senate Office Bldg. 7-9

D. C., Washington—Principal sub-contracts on \$3,000,000 extensible bldg. for Department of Agriculture, on which work is about 70% complete, as follows: Painting, Barker Painting Co., 214 E. 37th St., New York; glass and glazing, Walsh Bros., 3430 14th St., N. W.; plaster, S. Lozupone, 808 Fifth St., N. W.; terra cotta, Atlantic Terra Cotta Co., Insurance Bldg.; conc. and cement, Pietrowski & Konop Co., Inc., 14th and B Sts., N. W.; elect. work, Howard P. Foley Co., 2020 I St., N. W.; granite, Phelps Stone Co., Ninth and Douglas Sts., N. E.; roofing, Philip Carey Co., 4104 Georgia Ave., N. W.; brick work, E. A. Rule, 3206 K St., N. W., all Washington; plumbing, heating and ventilating, J. L. Murphy, Inc., 340 E. 44th St., New York; marble, Candoro Marble Co., Vestal St., Knoxville, Tenn.; hardware, Fries, Beall & Sharp Co., 734 10th St., N. W.; Starrett Brothers & Eken, Contrs., 1300 B St., S. W., both Washington. 4-30

Fla., Miami—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, D. C., let contract at \$35,985 to Algernon Blair, First Natl. Bk. Bldg., Montgomery, Ala., for excavation and foundation work for \$1,641,000 Federal bldg.; superstructure plans approved; probably soon call for bids; Phineas E. Paist & Harold D. Stewart, Archts.; L. Murry Dixon, Asso. Archt., all Ingraham Bldg., Miami, and Ponce de Leon Entrance Bldg., Coral Gables; Maurice H. Connell, Mech. Engr., McAllister Hotel Bldg., Miami, Harvey Baxter, Struct. Engr., 518 Harding St., Coconut Grove, Miami. 7-30

La., Barksdale Field, Shreveport—Additional sub-contracts let on 34 double non-commissioned officers' quarters, L. C. Maples Construction Co., Contr., 3614 Avenue H, Fort Worth, Tex., on which 24 foundations are in and brick work and framing started; Plumbing and heating, O'Pry Plumbing & Heating Co., 350 1/2 Second St., Macon, Ga.; elect. work, R. & H. Electric Co., Longview, Tex.; common brick, Waterman Brick & Tile Co., Waskom, Tex.; flue lining, W. H. Dickey Manufacturing Co., Texarkana, Tex.; lathing and plastering, Albert Karelius, Shreveport; orna. iron, Southern Ornamental Iron Works, Arlington, Tex.; painting, Brasted Lacquer & Spray Equipment Co., Wichita, Kan.; cement, Lone Star Cement Co., Santa Fe Bldg., Dallas, Tex. 5-28

Tex., Fort Worth—Mosher Steel & Machinery Co., 5209 Maple St., Dallas, Tex., reported, has contract for 1450 tons struct. steel shapes for \$1,240,000 post office; 200 tons conc. bars, reported, let to Fort Worth Structural Steel Co., Fort Worth; Ralph Solitt & Sons Construction Co., Contr., 28 N. LaSalle St., Chicago, Ill. 7-30

Tex., Lubbock—A. M. Leftwich erect \$12,000 bldg., 1005 College Ave., to be leased to National Guard for armory; masonry and steel, comp. roof, 1 story; M. G. Bowles, Contr.

Hospitals, Sanitariums, Etc.

Ga., Augusta—Veterans Administration, Arlington Bldg., Washington, D. C., let contract to Batson-Cook Co., Inc., West Point, Ga., for officers' duplex quarters, Nos. 32 and 33, U. S. Veterans Hospital; conc. work, floor tile, slate and metal roofing, metal lathing, roof ventilators, outside service connections. 7-23

La., New Orleans—Dr. J. T. Nix, Carrollton Ave. and Jeanette Place, extend clinic 60 ft.

Miss., Jackson—State Hospital Removal, Improvement and Land Sale Comsn., Jackson, let contract at \$26,600 for supt.'s home and at \$47,400 for doctor's apartment bldg., both White Group No. 5, \$5,000,000 Mississippi Insane Hospital, to C. G. Kershaw Contracting Co., Woodward Bldg., Birmingham, Ala.; heating in Negro Group No. 1 as follows: For 2 patients' cottages at \$9000 and 2 epileptic cottages at \$7500 to Alonzo B. Hayden, Inc., Pass Christian, Miss.; for hospital bldg., at \$5200 to Davis Plumbing Co., 115 S. State St., Jackson; dining hall bldg., at \$4300 and 2 convalescent cottages at \$4400 to Weaver & Conn, Gulfport, Miss.; plumbing in bldgs. in Negro Group No. 1 to Weaver & Conn; N. W. Overstreet, Archt., Standard Life Bldg., Jackson; Vinson B. Smith, Advisory Archt., Gulfport; will advertise for new bids on plumbing and heating for Negro Group No. 2, date not determined. 7-30

Mo., Springfield—Department of Justice, Sanford Bates, Director, Bureau of Prisons, Washington, D. C., approved plans for \$2,500,000 hospital for defective delinquents; 850 beds; Joannes & Marlow, 420 Lexington Ave., New York, archts. for main portion; Alban B. Mills, 15 E. 47th St., New York, archts. for tubercular unit. 7-2

Tex., Dallas—Dr. P. J. Murphy, Medical Arts Bldg., started work on \$25,000 clinic, Fairmount and Wellborn Sts.; Mediterranean type, stone, tile roof; operating rooms, laboratory, etc.; Fooshee & Cheek, Archts., 1901 1/2 N. Harwood St.

Va.-Tenn., Bristol—Grace Hospital, Dr. A. J. Kimmons, start work Aug. 15 on \$12,000 addition; 15 rooms, fireproof, brick and conc.; X-ray room; G. M. & G. C. Stone, Archts., T. G. Martin & Sons, Contrs.

W. Va., Huntington—Huntington Gravel & Supply Co., 20th St. and Second Ave., has sand and gravel contract at about \$20,000 for \$700,000 U. S. Veterans' Hospital; Worsham Bros., Contrs., Empire Bldg., Knoxville, Tenn. 8-6

Hotels and Apartments

Fla., Miami Beach—L. E. Johnson, Melrose, Mass., and 37 Indian Creek Drive, has plans by Robert A. Taylor, Espanola Way and Penn Ave., for 4-unit apartment house, Indian Creek Drive north of 30th St.; rein. conc. conc. block, stucco, 30 x 72 ft.; G. Henry Hunt, Inc., Contr., 1636 S. W. Ninth St., Miami, receiving sub-bids.

Md., Baltimore—Stelmach & Engel, 4005 Forest Park Ave., has contract to remodel 3621 Fairview Ave., for apartments; for Adolph De Bois, 1222 N. Charles St.; Samuel Smullian, Archt., 3721 Belle Ave.

Okl., Oklahoma City—Following sub-contractors on auto hotel, for Marquand Huckins; C. E. Huffman & Son, S. W. Natl. Bank Bldg., Contr.; Millwork, Tibbs-Dorsey Mfg. Co., 911 S. Walker St.; brick, United Brick & Tile Co., Petroleum Bldg.; steel, J. B. Klein Iron & Foundry Co., 1004 W. Second St.; Thos. L. Sorey, Archt., 14 N. Broadway. 7-23

Tenn., Nashville—M. S. Webb, 233 Third Ave., N., has building permit for apartment, 2715 Belmont Blvd.; 2 stories, brick; \$10,000.

Tex., Dallas—Mrs. Alva M. Hartfield has building permit for 8-apartment building, 4001-3-5 Hawthorne.

Miscellaneous

Fla., Hialeah—Following have contracts in connection with development of Miami Racing Assn., Joseph E. Widner, Chmn., Land Title Bldg., Philadelphia, Pa.; Lake and roads, Robert G. Lassiter & Co., S. W. 27th Ave.; water system, Crane Co., 85 N. W. 10th St.; wrecking old fronton; Robert G. Lassiter & Co.; 32nd St., Everglades Construction Co., 2705 N. W. 62nd St.; removing pole line, Julius Grethen, 331 Palm Ave.; moving gardener's house, moving hector supply building, and foundations for hector supply building, Leonard Brothers, 1944 N. W. Seventh Ave.; water supply, J. N. Vernam, 2598 S. W. 18th Ave.; wiring to Keegan's house, Julius Grethen; resetting boundary fence, Anchor Post Fence Co., 4246 N. W. 27th Court; road No. 2 fence, Bailey's Lumber

Yard; stables, St. John Construction Co., 629 N. W. Seventh St., Miami; grandstand, marl., Everglades Construction Co.; construct race tracks by force account; Smith & Riddle, Inc., Supvg. Engrs., 210 Royal Palm Way, Palm Beach, Fla.; L. W. Geisler, Archt., 19 Via Parigi, Palm Beach. 7-23

Fla., Hialeah—Miami Beach Jockey Club, Joseph M. Smoot, New York and Miami, Pres., let contract to M. R. Harrison Construction Co., 500 N. E. 45th St., Miami, as supervising contractors for \$2,000,000 development, including construction of 197-acre island in bay adjoining N. E. 79th St. causeway, complete race track, grandstand, clubhouse, stables, track, roadways, lake, landscaping; \$2,000,000. 8-6

Md., Bethesda—National Women's Country Club, 1108 16th St., N. W., let contract to Bradbury & Mohler, 1427 I St., for addition and alterations to locker house; Porter & Lockie, 1800 E St., N. W., all Washington, D. C.

Miss., Hattiesburg—Hulett Undertaking Co., Dr. J. E. Hulett, Forrest St., let contract to Walter Glynn for conc. and masonry work in connection with erection of 3-story, brick and stone trim funeral home; J. Frazer Smith, Archt., Goodwyn Institute Bldg., Memphis, Tenn. 8-23-30

Va., Yorktown—Coranti Tent and Seat Co., Thorofare, N. J., has contract for grandstand and bleacher seats for Yorktown Sesquicentennial celebration. 6-25

Schools

Ala., Russellville—Board of Education, R. C. Thomas, Supt., let contract at \$51,400 to F. D. Kimbrough, Pine Hall, for school; 270x180 ft., 16 classrooms, auditorium and cafeteria, 1 story and basement; conc. foundations, Barrett roofing; Warren, Knight & Davis, Archts., Protective Life Bldg., Birmingham. 7-16

Ark., Emerson—O. E. Johnson, Dubach, La., has contract for 12-room, brick veneer school.

Ark., Nashville—Nashville Special School Dist., J. H. Dodson, Howard County Supt. of Education, let contract at \$32,775 to A. B. Cupp and Sons for high school; 10 classrooms and auditorium to seat 600 persons; plumbing and heating to Pfeiffer Plumbing Co., 717 Main St.; elec. fixtures to Arkansas Electric Co., 316 Louisiana St., both Little Rock; plans by State Dept. of Education, C. M. Hirst, Little Rock. 6-25

D. C., Washington—District Commissioners, Roland M. Brennan, Chief Clerk, let contract to Ralph S. Herzog, 10 S. 18th St., Philadelphia, for Phoebe Hearst School, 37th and Tilden Sts.; \$105,895. 7-30

La., Baton Rouge—W. J. Riley, 805 S. Grand St., Monroe, has plumbing contract at \$39,000 for mechanical work in field house, Louisiana State University and Agricultural and Mechanical College; Otis Elevator Co., 532 Carondelet St., New Orleans, has elevatic Art Bldg.; Baton Rouge Electrical & Machine Works, 329 Florida St., Baton Rouge, electrical contract at \$36,667, for Field house; Hart Enterprise Electrical Co., Inc., 826 Baronne St., New Orleans, electrical contract at \$86,513 for art building; American Heating & Plumbing Co., Inc., 829 Baronne St., New Orleans, mechanical contract at \$115,997 for art building; Caldwell Bros. Constr., 816 Howard Ave., New Orleans. 8-6

La., Evergreen—Avozelles Parish School Board, Markville, let contract to W. J. Quick, 424 Bilbo St., Lake Charles, for \$25,000 school; 2 stories, brick, wood floors, rein. conc. foundation, asbestos shingle and slate roof, cast stone; W. T. Nolan, Archt., Canal Bank Bldg., New Orleans. 7-9

La., Houma—Terrebonne Parish School Board let contract at \$65,301 to T. A. Pittman, Inc., Canal Bank Bldg., New Orleans, for 2-story, rein. conc., brick, east stone and marble elementary school; tile, wood and conc. floors, comp. roof, steel sash, wire glass, ventilators; heating and plumbing contract at \$9700 to Standard Plumbing Heating Co., Baton Rouge; W. T. Nolan, Archt. and Engr., Canal Bank Bldg., New Orleans. 7-30

Md., Bel Air—Harford County School Commrs. let contract at \$46,645 to Minter Homes Corp., Dundalk, for 2 story brick school; John B. Hamme, Archt., York, Pa. 7-30

Md., Cumberland—James C. Power, Cumberland, has contract for \$24,000, 2-story, brick school at McCoole, for Allegany County Bd. of Education; R. C. Hitchens, Archt., Perrin Bldg., Cumberland. 7-9

N. C., Lexington—Davidson County Bd. of Education let contract to Wilson Brothers, Spencer, for 5-classroom addition to Fairgrove district school and gymnasium addition at Arcadia school.

N. C., Madison—Fowler Jones Lumber Co., 3043 Patterson Ave., Winston-Salem, have

contract for \$12,000 gymnasium addition to high school; Harry Barton, Archt., Jefferson Bldg., Greensboro.

Okla., Enid—State Bd. of Affairs, W. C. Hughes, Chmn., Oklahoma City, let contract to McMillan Construction Co. for ward buildings for School for Feeble-minded.

Okla., Stillwater—A. E. Skouby, Guthrie, has contract for meat laboratory, Agricultural and Mechanical College; also for feed sheds and barn addition; Phillip A. Wilbert, Archt.

La., Baton Rouge—W. J. Riley, 805 S. Grand St., Monroe, has plumbing contract at \$39,000 for mechanical work in field house, Louisiana State University and Agricultural and Mechanical College; Caldwell Bros., Contr., 516 Howard Ave., New Orleans. 8-6

Okla., Oklahoma City—City, M. Peshek, Jr., Clerk, have plans ready about Aug. 25 for 4-H club building; \$50,000; brick and rein. conc.; L. M. Bush, City Engr.

Okla., Pauls Valley—State Bd. of Affairs, W. C. Hughes, Chmn., Oklahoma City, let contract at \$33,320 to Barber and Short Construction Co., Oklahoma City, for dormitory at Boys' Training School; 3 stories, 38x102 ft., rein. conc., conc. floors, 20-year built-up asphalt roof, pouring foundation.

Tex., Brownsville—Brownsville Independent School Dist., J. P. Maher, Sec., Bd. of Trustees, let contract to Dan B. Ridpath for elementary school, Eighth and Madison Sts.

Tex., Crystal City—Oblate Fathers, Father Dan Taylor, let contract to L. F. Hall for St. Catherine's free school; Leo M. J. Diemann, Archt., 306 E. Commerce St., San Antonio.

Tex., Flatonia—William Ungerer has contract for \$25,000 school for Flatonia Ind. School Dist., R. Newell Waters, Archt., Weslaco; W. E. Simpson Co., Engrs., 942 Milam Bldg., San Antonio. 7-16

Tex., Navarro—Mentzel & Wood, Sherman, have contract for Mildred High School, Dis-

trict No. 18; 2 stories, rein. foundation; 4 classrooms, clinic, study hall, library, offices; plumbing to C. A. Mullen; electric to Richard Scott.

Stores

Ala., Birmingham—Lee Brothers, 2321 Morris Ave., erect store; 50x128 ft., 1 story, steel truss, built-up roof, conc. floor; M. C. Fanks, Contr., 2501 S. First Ave.

D. C., Washington—Kass Realty Co., 1116 Vermont Ave., erect 1-story, brick store, 4885 Conduit Rd.; comp. roof; M. Platshon, Archt.; owner builds.

D. C., Washington—John H. Klein, 1812 Varnum St., erect \$11,000 store, 3926 12th St., N. E.; 1 story, brick, tin roof, hot water heat; owner builds.

D. C., Washington—Inez M. Brown erect store, 1214 Eighth St.; 3 stories, brick and stone, slag roof, steam heat; C. H. Tompkins Co., 1608 K St., N. W., Contr.; M. Mesrobian, Archt., 5115 41st St., N. W.

D. C., Washington—R. T. McMullen, 1605 Wisconsin Ave., has contract for addition to store and apartment building, 1661 35th St., for Harry J. Baker, 1829 35th St., N. W.; 2 stories, brick, hot water heat; tin roof.

D. C., Washington—Morrison Brothers, Bethesda, Md., has contract for store, Wisconsin Ave. and Jennifer St., for L. Mazza, 3500 Connecticut Ave., N. W.; \$14,000; J. E. W. Sohl, Archt., 1336 New York Ave., N. W.

D. C., Washington—Lewis Engineering & Construction Co., 3211 McKinley St., N. W., has contract for alterations to store, Seventh and L Sts., N. W., for H. Abramson, Seventh and L St., N. W.; S. M. Smith, Archt., Shoreham Bldg.

D. C., Washington—Martin Brothers, 1341 Connecticut Ave., has contract for three stores, Third and Kennedy Sts., N. W., for Jos. D. Gatti, 4200 16th St., N. W.

Fla., Jacksonville—T. A. Ward, 26 E. 16th St., has contract for remodeling store of Stephen Cockrell, 1301 Main St.

Fla., Lakeland—W. S. Myrick remodel store, Main and Kentucky Sts.; H. B. Trauger, Contr.

Fla., Miami—Nunnally Candy Co., 154 Flagler St., let contract to Gunn & Goll, 69 N. E. 36th St., for additions and alterations; George Bruck, Archt., 518 Security Bldg.

Fla., Tampa—Morris Cafeteria Co. remodel first floor of building, 608 Florida Ave., for cafeteria; \$16,000; Francis J. Kennard & Son, Archts., 308 Krause Bldg.; George T. Taylor, Contr., 109 E. Lafayette St.

Md., Baltimore—Mutchnick & Rebusky, 900 Aisquith St., alter store, 1001 Pennsylvania Ave.; A. Finkelstein, Archt., Equitable Bldg.

Md., Baltimore—M. A. Long Co., 10 W. Chase St., has contract to alter mezzanine and change stairways of store building, Howard and Saratoga Sts., S. Schleisner Co., 220 N. Howard St., lessee; \$10,000.

Md., Baltimore—A. Goodman, 2000 Whittier Ave., has contract for store alterations, 1430-32 Pennsylvania Ave., for Pennsylvania Building & Loan Assn.; Frederick E. Beall, Archt., 334 St. Paul St.

N. C., Wilmington—Star-News, Inc., has work 50 per cent completed on business building, Harbor Island, to promote new style architecture; tile and brick, stucco, 1 story, hardwood floors, brick and conc. foundation, tile roof; Lynch & Ford, Archt.; W. A. Simon, Engr. and Contr.

Okla., Oklahoma City—W. S. Key, Perrine Bldg., remodeling business building; \$10,000; Harmon & Mattison, Contr., Joe I. Davis, Archt., First Natl. Bldg.

Okla., Oklahoma City—Sam S. Laughlin, 209 E. 23rd St., has contract for Valley Brook school; \$21,995; Butler Co., Archts., Insurance Bldg.

Theatres

Fla., Ybor City—B. A. Scaglione has permit for \$25,000 theater, East Broadway; 1 story, 65x95 ft.; seat 1000 persons; G. H. French, Archt.; Frank Settecasti, Contr.

WANT SECTION

THE CLASSIFICATIONS IN THIS SECTION ARE:

Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

Machinery and Supplies

Boilers.—Hackley Morrison (Mchy. Dealer) Mutual Bldg., Richmond, Va.—Wants prices and data on 300 to 600-h. p. water tube boiler, 400 lb. working pressure, 600 h. p. preferred; 150-h. p. Scotch boiler, 125 lb. pressure.

Boiler.—Taylor-Parker Co., Inc. (Mchy. Dealer), Water St. and Commercial Pl., Norfolk, Va.—Wants prices and data on 300 to 600-h. p., used water tube boiler, 400 lb. working pressure; must be modern and pass insurance inspection.

Concrete Block Forms.—F. G. Gregory (Contractor), Sutherland, Va.—Wants prices and data on concrete block forms.

Crane.—Joseph Smith (Iron and Steel), 3619 Benning Rd., N. E., Washington, D. C.—Wants prices and data on used, 10 or 15-ton, gasoline operated, crawler type crane, with approx. 50-ft. boom.

Crossarm Machinery, etc.—Woodstock Mfg. Co., Inc., P. O. Box 97, Station A, Charleston, S. C.—Wants prices and data on rebuilt crossarm machinery to bore standard crossarms up to 10 ft. long; machine as manufactured by Chattanooga Machinery Co., or similar modern machine, having 10 horizontal spindlers and 5 vertical spindlers to bore crossarms both ways at least 10 ft. long; also crossarm rounder, preferably as manufactured by Chattanooga Machinery Co., with 2 rounding heads, both rotating in opposite direction; both machines to handle stock up to 6 in. thickness and 8 in. width; majority stock to be 3½x4½.

Electric Furnace.—Interstate Foundry & Machine Co., Johnson City, Tenn.—Wants prices and data on used electric furnace, capacity about 500 lb.

Fan and Dust Collector.—Mullins Lumber Co., Mullins, S. C.—Wants prices and data on 55 or 60-in. fan with dust collector.

Laboratory Equipment.—Concho Refinery Co., H. J. Earle, Box 746, San Angelo, Tex.—Wants data and prices on laboratory equipment for 500 bbl. refinery at Pioneer, Tex.

Hackley Morrison (Mchy. Dealer), Mutual Bldg., Richmond, Va.—Wants prices and data on following:

- (1) **Exhaust Ventilating Fans**—good condition, to operate in skylight with belt shaft vertical and blade horizontal
- (2) **Motors**—two, 75 h. p., variable speed, slip ring, constant horsepower, 440 volt, 3 phase, 60 cycle, complete with controller, resistance and base, with speed variation of 580 to 1150 r. p. m., motors to develop full horsepower at slow speed
- (3) **Refrigerating Unit**—used, complete, size 1/3 h. p., with motor, single phase, 110-220 volt, first-class condition.

Kansas City & Des Moines Motor Transport Co., 806 Exchange Bldg., 1207 Grand Ave., Kansas City, Mo.—Wants 9 or 10 ton tractor trailer outfit complete with Van bodies.

Mallen Soap Products Co., Towler Bldg., Umatilla, Fla., wants data and prices on following:

- (1) **Dryer**
- (2) **Mixing Machines**
- (3) **Powder Grinder**—capacity 20,000 lbs.

Pecan Shelling Machinery.—T. W. Allen, Troy, Ala., interested in setting up small pecan shelling plant at Troy—Wants prices and data from manufacturers of necessary machinery.

Punch Presses.—Sunnyland Specialty Corp., 217 Franklin St., Tampa, Fla.—Wants prices and data on power punch press for light work; also small punch presser, foot power.

Peanut Shelling and Blanching Equipment, etc.—Edward S. Beebe, P. O. Box 3447, Daytona Beach, Fla.—Wants prices and data from manufacturers of equipment for handling and working peanuts; especially shelling and blanching equipment.

Texas Fibres Co., 928 Post-Dispatch Bldg., Houston, Tex.—Wants prices and data on following:

- (1) **Bleaching Kiers**—high pressure, with loading and unloading baskets, raw stock
- (2) **Boilers**
- (3) **Dryers**—raw stock
- (4) **Extractors (Centrifugal)**—with baskets for raw stock
- (5) **Presses**—round bale
- (6) **Retorts**—for gas bleaching.

W. M. Smith & Co. (Mchy. Dealer), Box 1709, Birmingham, Ala.—Wants to represent manufacturers of following:

- (1) **Tractors**—industrial and agricultural
- (2) **Windmills.**

Wood Distillation Machinery.—Ben N. Garrett, Sheldon, Tex.—Preparing to construct wood distilling plant at Sheldon, on Southern Pacific Lines, about 20 miles out of Houston, near San Jacinto River, and wants prices and data from manufacturers of machinery and equipment.

Miscellaneous

Belting.—W. M. Smith & Co. (Mchy. Dealer), Box 1709, Birmingham, Ala.—Wants to represent manufacturer of leather belting.

Box Cartons and Shipping Cases.—Mallen Soap Products Co., Towler Bldg., Umatilla, Fla.—Wants prices and data on folding box cartons and shipping cases.

Containers (Paper), etc.—E. H. Hopkins, Box 1, Keddie, Fla., preparing to put several small household articles on market, and wants prices and data from manufacturers of

small round container to hold 1 oz. dichloride, shaker type for 2 oz., and hard paper carrier box for packing 4 of the 1-oz. containers; will also need several other sizes paper containers and carriers.

Enameling.—Shenandoah Mfg. Co. (Brooding Systems, Heating Plants, etc.), Harrisburg, Va.—Wants prices and data from firms in position to do custom enameling, vitreous enameling on steel.

Lightning Rods.—William A. Lovett, Sr., Monroeville, Ala.—Wants prices and data from manufacturers of lightning rods.

Men's Caps.—Bedford Tobacco Co., W. W. Berry, Mgr., Bedford, Va.—Wants prices and data from manufacturers of men's caps.

Scales.—Collins Durax Co., Salisbury, N. C.—Wants prices and data on heavy spring scales to weigh loads up to 2 or 3 tons.

Septic Tank and Toilets.—Jas. E. Taylor, 712 Fredericksburg Rd., San Antonio, Tex.—Wants prices and data from manufacturers on septic tank and sanitary toilets for use in tourist camps located outside of cities.

Snap Fasteners.—W. H. Connery 719 Hayden Lane, Orlando, Fla.—Wants prices and data from manufacturers of snap fasteners, such as are used on gloves, etc.

Mallen Soap Products Co., Towler Bldg., Umatilla, Fla., wants data and prices on following:

- (1) **Bottles**—large neck, 8 and 15 oz.
- (2) **Caustic Soda**
- (3) **Epsom Salts (Phosphate)**—in bulk
- (4) **Jars (Fancy)**—for bath salts and powder
- (5) **Paste Board Containers**—holding 50 and 100 lbs., round preferred
- (6) **Soda Ash**
- (7) **Solvay of Soda.**

Sunnyland Specialty Corp., 217 Franklin St., Tampa, Fla.—Wants prices and data on following:

- (1) **Metal Stamping**—small, aluminum or white metal
- (2) **Stain**—mahogany and cherry
- (3) **Wire Brads and Nails**—small, in bulk, for small wood boxes.

Building Material and Equipment

Ray C. Arnold, Archt., 910 Staley Bldg., Wichita Falls, Tex., wants prices on following for \$50,000 hospital bldg.:

- Door Frames**—metal, interior
- Elevators**
- Flooring**—linoleum, tile
- Roofing**—flat
- Steel Sash and Trim**
- Vaults**
- Vault Lights.**

Bids Asked

Air Compressor.—Post Office Dept., Pur. Agt., Washington, D. C.—Bids Aug. 19 for air compressor.

Aluminum Sheets.—Pennsylvania R. R. Co., C. E. Walsh, Pur. Agt., Room 415, No. 15 N. 32d St., Philadelphia, Pa.—Bids Aug. 19 for Cont. 22-1931, aluminum sheets.

Barrels.—Chemical Warfare Service, Edgewood Arsenal, Md.—Bids Aug. 19 for 50 gal. barrels.

Barge House.—U. S. Engr. Office, First Dist., New Orleans, La.—Bids Aug. 18 for constructing steel house on barge, 18x39 ft., complete, on steel barge 60x22x4 ft.

Booster Pump (Centrifugal).—See Water Supply System.

Bridges.—State of Kentucky.—Bids for 2 bridges. See Construction News—Roads, Streets and Paving.

Burlap.—Purchase and Issue Sub-division, Veterans' Bureau, Washington, D. C.—Bids Aug. 17 for 1600 yd. burlap.

Cable.—Comms., D. C.—Washington, D. C.—Bids Aug. 20 for composite telephone and signal cable.

Cable.—U. S. Coast Guard Headquarters, Washington, D. C.—Bids Aug. 17 for 160,000 ft. cable.

Concrete (Ready Mixed).—Q. M. Dept., Office of Commanding Officer, 20th and C St., N. W., Washington, D. C.—Bids Aug. 17 for concrete, ready mixed, to be prepared and delivered on work in Arlington National Cemetery, Fort Myer, Va., approx. 220 cu. yd.

Cylinder and Grinder Machine.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 25 for motor driven cylinder reborer and grinder machine, portable.

Die Cutting and Engraving Machine.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 18 for floor type, motor driven universal die cutting and engraving machine.

Dikes and Revetment.—U. S. Engr. Office, 707 Postal Telegraph Bldg., Kansas City, Mo.—Bids Aug. 22 for furnishing all labor, minor materials and portion of major materials for dikes and all materials for revetment and performing all work for constructing about 7500 lin. ft. standard pile clump dikes and about 19,000 lin. ft. standard revetment, Missouri River, Little Missouri and Glasgow Bends, 6.5 mi. upstream from Glasgow.

Dredging.—U. S. Engr. Office, Jacksonville, Fla.—Bids Aug. 27 for dredging approx. 1000 cu. yd. material from 7 shoal areas, Oklawaha River, and removal from river of 15 obstructions consisting of snags, logs, stumps and overhanging trees.

Dredging.—Bd. of Awards, Office of City Register, City Hall, Baltimore, Md.—Bids Aug. 19 for maintenance dredging in Baltimore Harbor, comprising Patapsco River and tributaries; Elmer E. Hammond, Harbor Engr., Bureau of Harbors.

Drugs and Chemicals.—Commanding Officer, St. Louis Medical Depot, Second and Arsenal St., St. Louis, Mo.—Bids Aug. 18 for drugs and chemicals.

Electric Refrigerators.—Div. of Supply, Treasury Dept., Washington, D. C.—Bids Aug. 17 for 8 electric refrigerators.

Engine Lathes.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 25 for motor driven engine lathes.

Engines.—U. S. Coast Guard Headquarters, Washington, D. C.—Bids Aug. 17 for 2 marine oil engines, 300 brake h. p., including 1 engine driven generator and compressor set, motor driven air compressor, 6 air storage tanks, 2 mufflers, 2 lubricating oil filter tanks, 2 oil coolers, fuel oil service tank, and 2 sets tools.

Face Mill Grinder.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 18 for face mill grinder machine, complete with motor.

Fire Extinguishers.—Purchase and Issue Sub-division, Veterans' Bureau, Washington, D. C.—Bids Aug. 18 for 2 fire extinguishers.

Freight Elevator.—Supvg. Archt., Treasury Dept., Washington, D. C.—Bids Aug. 27 for freight elevator for Agriculture extensible buildings, Washington.

Generating Plant.—U. S. Engr. Office, Mobile, Ala.—Bids Aug. 31 for furnishing direct connected Diesel electric generating plant complete, ready for installation.

Generator.—Supvg. Archt., Treasury Dept., Washington, D. C.—Bids Aug. 25 for synchronous motor generator set.

Grinding Machine.—Supvg. Archt., Treasury Dept., Washington, D. C.—Bids Aug. 18 for motor driven grinding machine for Norfolk, Va.

Grinding Machine.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 25 for motor-driven grinding machine.

Grinding Machine.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 18 for motor driven grinding machine.

Knife Blade Grinder.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 25 for motor-driven knife blade grinder.

Leather Dyes.—Purchase and Issue Sub-division, Veterans' Bureau, Washington, D. C.—Bids Aug. 17 for 144 packages leather dyes.

Lathe.—Post Office Dept., Pur. Agt., Washington, D. C.—Bids Aug. 24 for brake drum turning lathe with bits.

Lumber.—Commanding Officer, San Antonio Arsenal, San Antonio, Tex.—Bids Aug. 19 for 244 pieces yellow pine lumber and 10 pieces oak lumber.

Manifolding Paper.—Purchase and Issue Sub-division, Veterans' Bureau, Washington, D. C.—Bids Aug. 25 for 300 reams manifolding paper.

Mortiser.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 18 for power feed, hollow chisel, motor in head type mortiser.

Photographic Supplies.—Commanding Officer, St. Louis Medical Depot, Second and Arsenal St., St. Louis, Mo.—Bids Aug. 19 for films, photographic paper, lantern slide plates, hangers, voltmeters, x-ray tube, aprons, sheeting, etc.

Pipe, etc.—Washington Quartermaster Depot, Office Commanding Officer, 20th and C Sts., Washington, D. C.—Bids Aug. 19 for pipe, couplings, valves, etc.

Pipe (Concrete).—See Sewer Construction.

Piping.—See Water Supply System.

Picket Boats.—U. S. Coast Guard Headquarters, Washington, D. C.—Bids Aug. 24 for building 4, 5 or 6 cabin picket boats.

Planer.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 18 for motor driven, traveling head planer.

Planer and Jointer.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 25 for direct motor driven, head planer and jointer.

Plumbing, Heating, etc.—Custodian, U. S. Post Office, South Boston, Va.—Bids Aug. 22 for plumbing, heating and lighting work.

Radial Drill.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 18 for motor driven radial drill.

Rip Rap and Gravel.—Ben M. Sawyer, Ch. Highway Commr., Columbia, S. C.—Bids Aug. 18 for furnishing, f. o. b. cars Nichols, S. C., 600 tons rip rap; also, f. o. b. Ashpepo, S. C., approx. 6400 tons gravel.

Road Building Materials.—State Highway Comsn., Room 614, Louisiana National Bank Bldg., Baton Rouge, La.—Bids Aug. 25 for furnishing following materials: Washed and screened gravel, 40% sand clay gravel, reef shell, clam shell, crushed limestone, slag and sand in such quantities as may be required by maintenance department for maintenance purposes during Sept., 1931.

Road Grader.—Chief of Engrs., U. S. Army, Washington, D. C.—Bids Aug. 20 for road grader, complete with 10-ft. blade, scarifier, tools and spare parts.

Roads.—State of Kentucky. Bids for 2 roads. See Construction News—Roads, Streets and Paving.

Roads.—Brownsville, Tex. See Construction News—Roads, Streets and Paving.

Saw Filing, Setting and Jointing Machine.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 25 for motor-driven, automatic saw filing, setting and jointing machine.

School Supplies and Equipment.—Bd. of Awards, Office of City Register, City Hall, Baltimore, Md.—Bids Aug. 19 for furniture and equipment for various schools; for laboratory supplies for various schools and for print shop paper and miscellaneous supplies for Dept. of Education; Joshua R. Jolly, Act. Sec., Bd. of School Comms.

Screw Machine.—Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Aug. 25 for motor-driven, automatic screw machine.

Screens.—Constructing Quartermaster, Aberdeen Proving Ground, Md.—Bids Sept. 1 for screening hospital.

Sewer Construction.—City of Parkersburg, W. Va., Allen C. Murdock, Mayor, Morris Knowles, Inc., Const. Engrs., Westinghouse Bldg., Pittsburgh, Pa.—Bids Aug. 18 for construction of sanitary sewer system, Dist. No. 1, from Ohio Ave. between 25 and 26 Sts., etc.; work includes 32,000 ft. of 6-in. vit. sewer pipe and specials; 35,000 ft. of 8-in. vit. sewer pipe and specials; 4600 ft. of 10-in. vit. sewer pipe and specials, 2000 ft. of 12-in. vit. pipe and specials and 1350 ft. of 18-in. vit. sewer pipe; 171 manholes; excavations, etc.

Sewer Construction.—City of Atlanta, Ga., L. A. Walker, Pur. Agt.—Bids Aug. 17 for labor and material and constructing Brookwood outfall sewer along Southern Railway near Peachtree St., and for making alterations to storm sewer at Moreland Ave. and Delaware Ave.; Gaston and Beecher St. trunk sewer from Gaston St. to Trunk Sewer east of Greenwood Ave., Sixth St. trunk sewer from Penn Ave. to Argonne Ave. and Sixth St.

Sewer Construction.—Comms. of Sewerage, Louisville, Ky., Frank D. Rash, Acting Chairman—Bids Aug. 20 for constructing Mill Creek trunk sewer, Contr. No. 58; work includes 3955 ft. of 13 ft. 6-in. x 20 ft. 3-in. inverter egg rein. sewer; 2769 ft. of 12 ft. 8-in. x 19 ft. inverted egg rein. conc. sewer; 150 ft. of 8 ft. 4-in. x 12 ft. 6-in. inverted egg rein. conc. sewer; overflow structure, junction chamber, manholes, etc.; 22,800 cu. yds. rein. or plain conc.; 5,100,000 lbs. steel rein. bars; Woolsey M. Caye, Tech. Engr.

Sewer Construction.—Treas. Dept., Office of Jas. A. Wetmore, Acting Supvg. Archt., Washington, D. C.—Bids Sept. 2 for furnishing all labor and materials and performing all work for permanent sewers and work incident thereto at U. S. Immigration Station, Baltimore, Md.; drawings, etc., may be obtained from custodian at the building or at office of Acting Supvg. Archt.

Steel Furniture.—Purchase and Issue Subdivision, Veterans' Bureau, Washington, D. C.—Bids Aug. 18 for wood turning lathe, period ending June 30, 1932 (approx. 125 dressers, 125 side chairs, 125 desks, 100 rocking chairs, 100 foot stools, 300 bed screens and 300 verbed tables).

Streets.—Baltimore, Md. See Construction News—Roads, Streets and Paving.

Streets.—Warrenton, N. C. See Construction News—Roads, Streets and Paving.

Storm Water Drainage System.—War Dept. office of Constructing Quartermaster, Langley Field, Va.—Bids Sept. 8 for constructing storm water drainage system for hangar and barracks area, Langley Field; information on application.

Suction Hose.—U. S. Engr. Office, Huntington, W. Va.—Bids Aug. 17 for suction hose for pumpboat No. 160.

Tank and Tower.—See Water Supply System.

Tele-Stereoscope.—U. S. Engr. Office, Huntington, W. Va.—Bids Aug. 17 for tele-stereoscope for district office.

Transformer.—See Water Supply System.

Truck.—U. S. Coast Guard Headquarters, Washington, D. C.—Bids Aug. 18 for 1½-ton truck, 6 wheel, 4 rear wheels, gear driven, for Washington.

Truck.—U. S. Coast Guard Headquarters, Washington, D. C.—Bids Aug. 21 for truck

with telephone construction body, equipped included winch; commercial rating 2 tons.

Turning Lathe.—Purchase and Issue Subdivision, Veterans' Bureau, Washington, D. C.—Bids Aug. 18 for wood turning laths, belt driven.

Turnbuckles, etc.—U. S. Engr. Office, Jacksonville, Fla.—Bids Aug. 17 for 12 forged steel turnbuckles and 11 forged steel rods.

Voltmeter, Ammeter, etc.—U. S. Engr. Office, Huntington, W. Va.—Bids Aug. 17 for voltmeter, ammeter, etc., for Locks No. 2 to 11, Kanawha River.

Water Softening System.—Veterans Administration, Construction Service, Room 764, Arlington Bldg., Washington, D. C.—Bids Aug. 25 for Zeolite water softening system at U. S. veterans hospital, Huntington, W. Va.

Woodworking Machine.—Div. of Supply, Treasury Dept., Washington, D. C.—Bids Aug. 17 for woodworking machine, motor driven.

Water Supply System.—U. S. Dept. of Agriculture, Thos. H. MacDonald, Ch. of Bureau of Public Roads, Willard Bldg., Washington, D. C.—Bids August 27 for water supply at terminus of Mount Vernon Memorial Highway, in Fairfax County, Va., near entrance to Mount Vernon Estate; work consists of deep well turbine pump with motor; 25,000 gal. elevated steel tank; centrifugal booster pump with motor, pump house, transformer, vault, piping, wiring, etc.; plans, etc. at office of Bureau of Public Roads.

the best wired and lighted retail establishment with display windows, first prize of \$250 was awarded to Calrow, Browne & Fitz-Gibbon, Norfolk, and second prize of \$100 to M. R. Marsh, Charlotte, N. C. Pringle & Smith, Atlanta, were awarded first prize of \$250 for the best wired and lighted office building of 5 stories or more, while J. E. Serrine & Co., Greenville, S. C., were awarded a first prize of \$250 for the commercial building with the best exterior electrical displays and decorative lighting, including electrical advertising suggested by the architects.

Trade Literature

Grasselli Chemical Company.—The mid-summer number of the Du Pont Magazine, publication of E. I. du Pont de Nemours & Co., Inc., Wilmington, Del., features an article outlining the history of the Grasselli Chemical Company, Cleveland, Ohio, manufacturers of acids and heavy chemicals, lithopone and other pigments, zinc and zinc products and explosives. Founded in 1839 by Eugene R. Grasselli, who equipped a plant at Cincinnati to make soda ash, alum and other acids, the company was acquired in 1928 by the du Pont organization and reincorporated in Delaware, to bring under one management collateral interests of the two companies. Caesar A. Grasselli, son of the founder, served the company as president from 1885 to 1916, being succeeded by his own son, Thomas S. Grasselli, who is now the active head. The Grasselli organization maintains 20 plants, more than a score of branch offices, warehouses, tank line, a fleet of steam barges and lighters and modern distribution facilities.

Yellow Strand Rope.—The Yellow Strand, publication of the Broderick & Bascom Rope Co., St. Louis, features in its August edition a story describing and illustrating in detail the construction of the huge Saluda dam and power plant near Columbia, S. C., in which Yellow Strand wire rope, purchased through the Tidewater Supply Company, Columbia, was extensively used. The publication also describes the uses of Yellow Strand in South Carolina's \$65,000,000 road-building program, in which it plays a double role, serving at granite crushing plants and in the clearing and grubbing of roadways. Illustrations show some applications of the rope in this work.

Gasket Manual.—The Victor Manufacturing & Gasket Co., Chicago, Ill., has issued catalog H, a publication of nearly 100 pages, designed as a handy reference manual on gaskets, gasket materials and packings for industrial and commercial use. Information presented is based on the company's experience of more than 22 years of specialization in gasket design and manufacture. Tables of engineering data are a feature of the catalog.

Morse Stock Drives.—Information and list prices on all Morse stock drives up to 50 horsepower are presented in a new catalog issued by the Morse Chain Co., Ithaca, N. Y. Designated as Morse Bulletin 44, the catalog also contains information on chain cases, sprockets and hunting links in addition to installation and lubrication data.

INDUSTRIAL NEWS

Building Road Machinery Plant

The Gledhill Road Machinery Company, Gallion, Ohio, has broken ground for a new factory in Gallion, on the main trunk lines of the Erie and the Big Four railroads. The first unit will be 90 by 200 feet, with a crane over all. Walter H. Hatch, Cleveland, is the architect, and contract for the structure is expected to be awarded soon. The Gledhill organization, E. C. Gledhill, president and general manager, and W. V. Goshorn, secretary and treasurer, manufactures the Gledhill road adjuster, a radical departure from other types of graders, it is said, and particularly adapted to laying all types of black top roads, adjusting traffic bound roads and adjusting new roads. Features of the machine are the use of a spirit level for adjusting a road from level to any desired crown, and the use of a 24-foot straight edge. The machine is now being manufactured at the plant of the Burch Corporation, Crestline, Ohio.

Forms Motor Coach Division

The White Company, Cleveland, Ohio, announces through George F. Russell, vice-president and sales manager, the formation of a motor coach division, a new sales department. J. A. Kiggen, Jr., New York state manager, has been promoted to sales manager of the coach division, with headquarters in Cleveland. This promotion entailed other promotions in the New York State district as follows: George M. Wilkins, formerly branch manager at Albany, succeeds Mr. Kiggen as manager of the New York State district; W. G. Winslow, manager at Utica, succeeds Mr. Wilkins at Albany, and Marmont Edson, manager of Syracuse, while continuing in that position will also manage the Utica branch.

Martin Receives Honorary Degree

Thomas W. Martin, president of the Alabama Power Company, Birmingham, one of the largest operating Southern organizations of the Commonwealth & Southern Corporation, New York, has been awarded the degree of LL.D. by Cumberland University, Lebanon, Tenn.

Yoder Representatives

Two new sales representatives have been announced by the Yoder Company, Cleveland, Ohio, manufacturers of machinery for building automobile sheet metal parts and rotary shears, and cold rolling machines for forming all shapes of light gauge metals, gang slitters, etc. The Harry G. Masten Company, 5229 Kimball avenue, Chicago, will represent the company in Chicago and vicinity, while the Wm. Wulf Company, 850 Maccabees Building, Detroit, will serve as representatives in that territory.

Southern Exide Battery Sales

The Electric Storage Battery Company, Philadelphia, manufacturers of Exide Iron-clad batteries, recently made the following Southern sales, according to Exide Topics, publication of the company: Four batteries for two new electric industrial trucks put in service at Yorkville, Ohio, for the Wheeling Steel Corporation; battery unit for a new industrial truck of the Ste. Genevieve Lime & Quarry Company, St. Louis, Mo.; battery for an industrial truck at the United States Naval Supply Base, Norfolk, Va., and a battery for a new electric industrial truck for the Armour Fertilizer Company, Baltimore.

Wire Lighting and Wiring Competition

The National Electric Light Association, Atlanta, Ga., recently concluded a lighting and wiring competition for architects in the states of Alabama, Florida, Georgia, Tennessee, Virginia, North Carolina and South Carolina. The first prize of \$500 for the best wired residence, costing \$12,500 or less, was awarded to Estes W. Mann, Memphis, Tenn., with a second prize of \$250 for this class of residence going to Arthur Neal Robinson, Atlanta, and a third prize of \$100 going to Rudolph, Cooke & Van Leeuwen, Norfolk, Va. A first prize of \$350, for residences costing more than \$12,500, was awarded V. H. Nellenbogen, Miami, Fla.; second prize of \$100 to Jefferson D. Powell, Jacksonville, Fla., and third prize of \$50 to Simons & Lapham of Charleston, S. C. For

Road Building Machinery.—Two bulletins issued by the Austin-Western Road Machinery Co., Chicago, are devoted respectively to Austin Mammoth Senior Graders and Western Crawler Dump Wagons. The graders, equipped with a two-piece rear telescopic axle and 12-foot blade, are made in leaning and straight wheel models, carrying such accessories as scarifier, back sloper, etc. The dump wagons, illustrated and described in bulletin W-31-H, come in 5-yard, 7-yard and 8-10 yard capacities.

"Roadlayer" Tracks.—The LaPlant-Choate Manufacturing Co., Inc., Cedar Rapids, Ia., has issued a 16-page catalog on "Roadlayer" Tracks, copies of which are now available. The company manufactures hydraulic-operated tractor equipment for "Caterpillar" tractors, round wheel and "Roadlayer" dump wagons, bulldozers, back fillers and snow plows.

Smith-Kaplan Turbine.—S. Morgan Smith Company, York, Pa., one of the world's largest manufacturers of hydraulic turbines, have issued a new catalog (123A) devoted to the Smith-Kaplan automatically adjustable blade turbine. Copies are available to those interested.

Pipe Lines for Pressure.—The American Rolling Mill Co., Middletown, Ohio, is distributing the Armco Engineering Bulletin recently published by the company's engineering department to assist engineers in designing pipe lines for pressure. The company manufactures Armco spiral welded pipe designed on the basis of specific requirements.

Convertible Digging Machine.—The Bucyrus-Erie Company, South Milwaukee, Wis., is distributing a bulletin devoted to its new 32-B, one-yard, gasoline, Diesel or electric convertible shovel, dragline, clamshell, crane. The bulletin outlines the design, specifications and construction of the new machine and illustrates some of its applications.

Standard Metal Directory.—The 1931 edition of the Standard Metal Directory has been issued by the Atlas Publishing Company, Inc., New York, publishers of the Daily Metal Reporter and other periodicals. It embraces a total of 778 pages and presents a general descriptive list of steel and metal manufacturers, furnaces, foundries and smelters in the United States and Canada. It also carries a number of advertisements conveniently indexed. The price of the volume is \$10.

SPEEDS POWER PROGRAM

Substation Construction and High Tension Line Planned

Louisville, Ky.—The Louisville Gas and Electric Company has announced an extensive construction program which it plans to complete by the end of the year. Work has already started and will be completed about September 1 on an additional mercury arc rectifier in the High substation to improve the service furnished for street car operations in the Highlands and for interurban cars to Jeffersonton and Fern Creek. Substations will be constructed on Young street, north of Payne street, and between Eleventh and Twelfth streets, west of Seventh Street road. In addition, a high tension line will be built from the company's Ohio Falls hydro-electric station to the substation south of Seventh Street road.

The largest of these projects will be the substation between Eleventh and Twelfth streets and the proposed high tension line, on which work is to be started August 15. The substation will be of the outdoor type to furnish better power facilities to the rapidly growing industrial section on the Southside. It will be connected with the central business district by an emergency feed line. The Clifton substation on Young street will be enclosed in a brick building of library design, equipped for converting electricity from 60 cycle, 13,200 volt alternating current to 600 volt direct current. Converting equipment will consist

of a modern mercury arc rectifier, fully automatic, and will cause no radio or telephone interference, according to T. B. Wilson, president of the company. There will be no rotating equipment. This substation is designed to improve the service furnished street cars in Crescent Hill, and work on the project will be started within a few weeks.

Mill Unit Completed

Pulaski, Va.—The Virginia Maid Hosiery Mills, Inc., T. J. Wallner, president, have completed a new plant unit and are installing machinery which will practically double the present output of the company. D. J. Phipps, Roanoke, Va., was the general contractor for the unit which is of mill type construction and contains about 12,000 square feet of floor space. It will take care of 32 full fashioned hosiery machines, 15 of which are being installed at this time, making a total of 33 machines, supplied by the Textile Machine Works, Reading, Pa. Since starting operations about August 1, 1929, the plant has run at full capacity, using three eight-hour shifts every 24 hours and employing a total of 135 hands. The new addition will require 115 additional operatives. Sub-contractors on the new unit include the following:

Structural steel—Virginia Bridge & Iron Co., Roanoke
Electrical work—Pulaski Electric Co., Pulaski
Heating and plumbing—R. H. Lowe & Co., Roanoke
Sprinkler—Crawford & Slaten, Atlanta, Ga.
Painting—Whitlock Brothers, Dublin, Va.

What Energy Can Do

As an interesting illustration of what may be accomplished by a man who is willing to work, even at a time when the farm situation is not particularly encouraging, Joshua A. Graham of Lakeland, Fla., in the following letter to the MANUFACTURERS RECORD, relates the experience of a young farmer and his family:

"In February, 1928, there came into my office in Lakeland a hard-working young farmer with his wife and three young children. They had managed to buy five acres of ground, had cleared it of all trees, stumps, palmettos and other rubbish, built a wire fence around it, built a little three-room house out of second-hand lumber, and then found themselves in distress although all this had been paid for at a cost of \$1000.

"I loaned this man \$250 at eight per cent interest. With this sum he set the land to strawberry plants, bought seed and fertilizer and kept enough money to buy groceries for his family until he could get returns from his vegetables.

"Out of that start he has bought and paid for an additional 20 acres of land which he practically cleared and fenced. He built another house, bought a truck and Ford car, lost \$400 in one closed bank and \$300 in another, added more to his house and equipped it with a carbide gas plant, including cooking stove and hot water heater, paid for one or two mules, and now has a few hundred dollars in the bank.

"May I add that his family has increased until he has six bright and interesting children. He told me that during the height of the past strawberry season he heard men on the street complaining of their inability to find work, but in answer to his offer to give them work picking strawberries at three cents a box the reply was, 'We won't pick berries for any man for three cents a box.' He put three of his children to picking berries, each of them working a fraction over three days and making a little more than nine days in total, and his check to the children was a few cents over \$35.

"This story needs no comment, but the Good Lord gave almost every man the opportunity of doing work. 'Energy will do anything that can be done in this world; and no talents, no circumstances, no opportunities will make a two legged animal a man without it.'"

Will Use 300,000,000 Cubic Feet Natural Gas

Atlanta, Ga.—Three installations completed by the Atlanta Gas Light Co. will mean the consumption of approximately 300,000,000 cubic feet of natural gas annually, according to an announcement here. The Atlanta Federal Penitentiary will use 200,000,000 cubic feet for heating and cooking, while the Atlanta-Biltmore Hotel will use 95,000,000 cubic feet for generating steam and electricity, and the Walter W. Brown Publishing Company will use about 4,000,000 cubic feet.

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36-in. and 12-in. c. i. water mains laid with Leadite Joints passing under old canal. Rochester Water Works, Rochester, N. Y.

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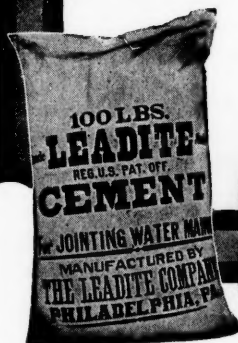
The old saying that "RESULTS SPEAK LOUDER THAN WORDS" certainly applies to LEADITE — for while WE KNOW what LEADITE will do (and what it has done for over a quarter century)—and while we make specific claims for its effectiveness and labor-saving qualities—yet, the VERY BEST EVIDENCE of its true value as a "jointing material" for bell and spigot pipe, is the "standing" of the large number of companies who use it, and what they say about it. As we have said, "RESULTS SPEAK LOUDER THAN WORDS."

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Southeastern Council Program

The general scope and some details of the plans of the Southeastern Council are announced by Walter C. Taylor, executive secretary, from headquarters in the Johnston Building, Charlotte, N. C. The Council was organized "to develop a broader acquaintance, together with the possibilities of the Southeastern States as an agricultural, industrial, commercial, recreational and healthful area." The program, at present, is:

Agriculture: Encourage the study of the agricultural resources of the Southeast; encourage a greater diversity of crops and stock raising; promote production of a higher quality of stock and farm products; encourage standardizing, grading and handling of farm products to command better prices, identified as products of the Southeast; promote a larger consumption of Southeastern products in the Southeast; promote the study of distribution and markets for Southeastern products; encourage a coordination of state agricultural programs; encourage coordination of legislation affecting agriculture in the Southeast.

Industry: Promote the study of the industrial resources of the Southeast; study possibilities for the closer integration of Southeastern industries by a greater interchange of raw materials and parts within the area; study the economics of plant location to promote a more efficient utilization of natural resources and local facilities; encourage a greater diversity in the industrial development of the Southeast; coordinate the industrial development programs of the several Southeastern States; encourage the coordination of legislation affecting industry in the Southeast.

Community Development: Encourage the study of the social and cultural resources of the Southeast; promote higher standards in local community programs; encourage the coordination of the highway program, and promote more uniformity in traffic regulations; promote more uniformity of policy and practice of public utilities; encourage the extension of railway transportation, power supply and other public services to sections now lagging in development; encourage the improvement of public health conditions that promote community growth; promote coordination of legislation affecting community development.

Recreational Development: Encourage the study of the recreational resources of the Southeast; stimulate tourist traffic to the Southeast for the purpose of increasing the cash income of the area, increasing permanent taxable wealth and increasing the sale of Southeastern products; improve the standards of service to tourists throughout the area; coordinate the promotion of the Southeast as a vacation land so that tourist traffic will be routed from state to state; promote the protection of visitors by proper regulation of tourist camps and wayside homes; promote improvement in the marking of highways and points of historic interest; stimulate better

methods of attracting visitors and permanent residents; promote the development of new vacation areas in the Southeast; promote the improvement of present recreational facilities; promote the coordination of legislation affecting recreational development.

Publicity: Advertise the agricultural, industrial, commercial, social, cultural and recreational resources of the Southeast, to the people of the Southeast and to the rest of America; promote the cooperative advertising of the Southeast by transportation agencies, hotels and other interests; encourage the coordination of the advertising from other sources within the area for the broad promotion of the Southeast.

The first conference of the Council will be held in Savannah, in October.

\$4,993,000 Road Awards

Austin, Tex.—Completing a three-day session, the State Highway Commission awarded contracts for the construction of 590 miles of roads and several bridges to involve a cost of more than \$4,993,000. Contracts cover a total of 156.5 miles of concrete highways, 310 miles of grading and drainage structures, 50 miles of surfacing other than concrete, 43 miles of mains, 23 bridges and the elimination of 4 railroad grade crossings. The three-day meeting of the commission combined the July-August sessions.

\$750,000 Office Building and Terminal

New Orleans, La.—Work is expected to begin about the first of next year on a new 8-story office building and freight terminal, to be erected here by the Southern Pacific Lines at a cost of \$750,000. General offices of the railroad will be moved to the new building which will occupy two squares bounded by Canal, Gravier, South Delta and South Front streets, and an increase in personnel is expected to follow. The new terminal, to replace the present terminal at the head of Poydras street, will be used for a receiving and distributing center for fruit and vegetable shipments. It will be equipped with cold storage and other modern facilities.

Radio Service for Air Route

Washington, D. C.—The Pennsylvania Air Lines, operating between Cleveland and Washington, through Akron and Pittsburgh, have negotiated a contract with the Western Electric Co., New York, for equipment to supply radio service over the entire route. Initial equipment will consist of beacon and weather broadcast receivers for airplanes. Ground stations giving two-way radio-phone service will eventually be added.



Turning Under Vetch and Austrian Peas on the Farm of R. D. Tatum, Palmetto, Ga.

This demonstration was made possible through the cooperation of the Georgia Railroad and the following data was obtained by E. S. Center, general agricultural agent:

Green Matter Turned Under and Content of Nitrogen

	Hairy vetch	Austrian peas
Pounds per 50 sq. ft. green matter.....	35	40
Pounds green matter per acre.....	30,492	34,848
Pounds nitrogen per acre.....	305	279
Pounds nitrate of soda required to furnish the same amount of nitrogen.....	2,033	1,858

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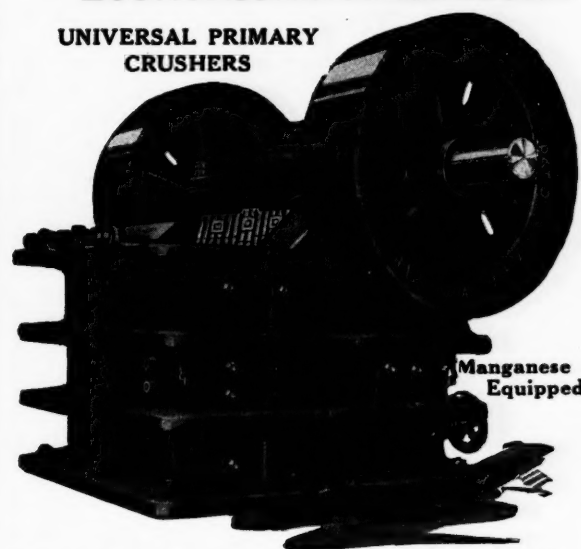
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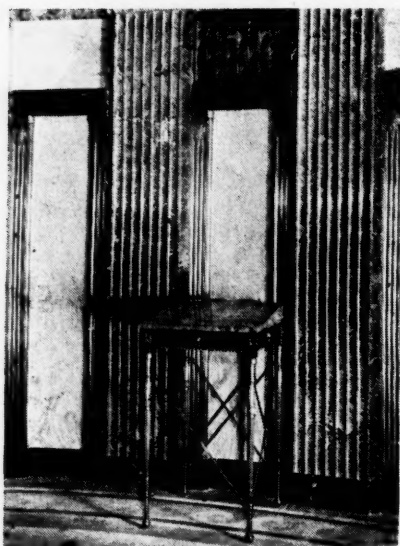
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ROOF INSULATION

The Lincoln Tomb



The rededication recently of the Lincoln Tomb at Springfield, Ill., attracted nation-wide interest, with President Hoover and Mr. Coolidge among those in attendance. The accompanying illustration gives some idea of the beauty and dignity of the rehabilitated interior of the building. The photograph, taken in the rotunda of the Tomb, shows the bronze registration desk with onyx top and also a portion of the bronze pilasters and the bronze cornice. Directly above the desk is illustrated the type of bronze grills used throughout the structure. This special bronze work was supplied by the J. S. Heath Company, Waukegan, Ill.

Too Much Cotton

The Department of Agriculture indicates a 15,584,000-bale cotton crop this year, provided weather conditions remain favorable. This enormous crop on top of a large carry-over is a heavy penalty for the South to pay in not reducing its acreage more than 10 per cent.

The lesson the farmers should learn from the predicament they are in now is that they must center every effort on increasing the quality and staple, and grow better cotton on fewer acres.

Capitol Parkway Movement

Chimney Rock, N. C.—Dr. Lucius B. Morse, president of the Chimney Rock Co., developer of the Chimney Rock and Lake Lure sections near Asheville, is interested with others in a movement looking to the marking and embellishment of the highway from Washington to the Smoky Mountains National Park, a distance of more than 600 miles, by way of Richmond, Raleigh, Greensboro, and Charlotte, thence westward to Lake

Lure and Chimney Rock, Asheville, and on for some 65 miles to the two Carolina entrances of the Park. Plans contemplate marking the road by placing special markers every five miles; stressing the tour as a recreational one rather than a speedway, and cooperating with affiliated county and city organizations in an embellishment scheme to include the proper use of shrubs, trees and ground covers and exercise a measurable control in the use of commercial signs. A meeting is expected to be held soon in Greensboro for the organization of Capitol Parkway to handle details of the project.

\$1,500,000 PAPER PLANT ADDITION

Will Double Capacity and Involve
Construction of 25-Mile Power Line

Bastrop, La.—Plans have been made by the Southern Advance Bag & Paper Co., Inc., controlled by the Advance Bag & Paper Co., Boston, Mass., for doubling the capacity of its plant at Hodge, near Bastrop, by the construction and equipment of a new paper mill unit, at a cost of approximately \$1,500,000. Machinery for the new mill is being removed from the company's plant at Howland, Me., and with the addition the Hodge plant will have a capacity of 200 tons of paper daily. The bag factory, it is said, will not be enlarged at this time. Power for operating the new mill will be secured from the Louisiana Power & Light Co., H. C. Couch, president, Pine Bluff, Ark., and the latter will begin the construction at once of a high tension transmission line of 110,000 volts from its Sterlington plant to the Southern Bag & Paper plant at Hodge, about 25 miles, at a cost of \$100,000.

Plans for 15-Story Building

Tyler, Tex.—Plans are expected to be ready for bidders August 25 for a new 15-story bank and office building to be erected here by the Peoples National Bank, of which Sam R. Greer is president. The structure will be 120 by 60 feet. Alfred C. Finn, Houston, is the architect.

Gas Association Section to Meet

Members of the Manufacturers section, American Gas Association, have been called to meet in annual session on September 17 and 18 at the Book-Cadillac Hotel, Detroit. Prominent representatives of the gas industry will appear on the program, and separate meetings of the gas range, water heater and space heater groups also will be held.

Better Quality Cotton Needed

Alabama Warehousing Company
Fireproof Sprinklered Warehouses at Birmingham and Mobile, Ala.
Members: American Warehousemen's Association, American Chain of Warehouses.
Birmingham, Ala.

Editor Manufacturers Record:

The editorial on the front cover of the MANUFACTURERS RECORD of July 30 prompts me to suggest that you use your powerful influence with the farmers of the South to cause them not to raise less cotton but better cotton. The length of staple of American cotton has been gradually getting shorter as the farmer strove for weight of product rather than quality. A large percentage of our cotton is now penalized approximately \$5. per bale on account of the short staple. This inferior quality has limited its consumption and thereby stimulated the consumption of foreign cotton.

I think your paper and our agricultural colleges could engage in no better undertaking than to press upon American cotton farmers the necessity for raising a longer staple and better quality of cotton rather than trying to force the price up by reducing acreage.

H. K. MILNER, President.

[Elsewhere in this issue is an editorial on the subject, written before Mr. Milner's suggestion was received.—Ed. MANUFACTURERS RECORD.]

Miami Invites Advertising Federation

In its campaign to obtain the 1932 convention of the Advertising Federation of America, Miami, Fla., has submitted to President Gilbert T. Hodges endorsements by a number of prominent men. Among those quoted are three past presidents of Kiwanis International, which held a successful convention in that city. In extending the invitation, Chairman George R. Hilty of the convention committee suggests the gathering be called Advertising Federation of America Western Hemisphere Good Will Convention. The visitors, Mr. Hilty adds, will be guests of the entire state.

United States Steel Opens Chattanooga Office

Chattanooga, Tenn. — The United States Steel Corporation, New York, has opened a district office at 509 First National Bank Building, Chattanooga, with L. P. Guice in charge. Associated with Mr. Guice will be R. W. Lane, solicitor, and E. L. Hunt, clerk. The Chattanooga office will represent such subsidiaries as the Carnegie Steel Company, Pittsburgh, Pa., the Illinois Steel Company, Chicago, Ill., and the Tennessee Coal, Iron and Railroad Company, Birmingham, Ala.

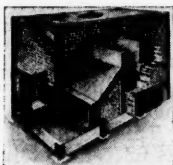
**SULPHURIC ACID
SUPERPHOSPHATE
TRIPLE SUPERPHOSPHATE
MANGANESE SULPHATE**

Manufactured and Distributed by
THE DAVISON CHEMICAL CO.

Main Office, Baltimore Trust Bldg., Baltimore, Md.

Main Plant, Baltimore; Pyrites Deposits Cienfuegos District, Cuba; Phosphate Rock Plant, Southern Phosphate Corporation, Bartow, Florida.

Plants Handling Complete Fertilizers and Fertilizer Materials: Maryland 11; Virginia 9; Pennsylvania 10; Georgia 2; Ohio 2; North Carolina 11; South Carolina, Mississippi, Louisiana, Texas, Indiana, West Virginia, Tennessee, Connecticut and New Jersey 1 each.



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The BROOKS-FISHER CO.

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Dallas

SPECIAL DEVICE BUILDERS

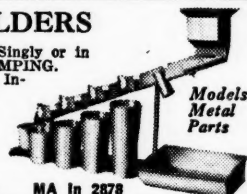
We Build Devices in Their Entirety, Either Singly or in Quantity. **TOOLS and DIES—METAL STAMPING.** Experimental Work—Special Manufacturing. Inventions Made Practical for Quantity Production.

GERDING BROS.

Mechanical Productionists

Pearl and Vine Sts., CINCINNATI, OHIO.

MA In 2878



CONTRACT MACHINE WORK

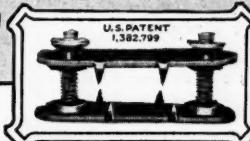
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YORK, PA.

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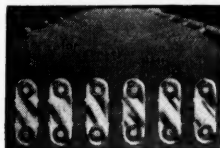
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PRINCIPLE



FAMED FOR
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CONVEYORS

ELEVATORS



THE recessed plates embed in the belt and compress it instead of pulling against the bolt holes. This provides great surplus strength. It equalizes the pull throughout the plies. Keeps belt ends intact avoiding trouble. FLEXCO HD Belt Fasteners are in extensive use throughout many industries, giving long reliable service wherever tight butt joints are desired. Made in steel and in monel metal. Sold by jobbers and belting houses in 5 sizes. Recommendations supplied gladly.

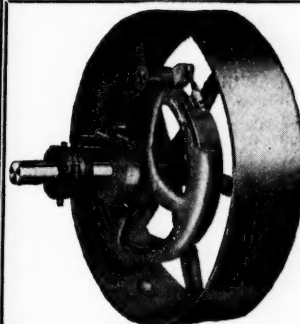
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In England at 135 Finsbury Pavement, London, E. C. 2

FLEXCO

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A Firm Grip

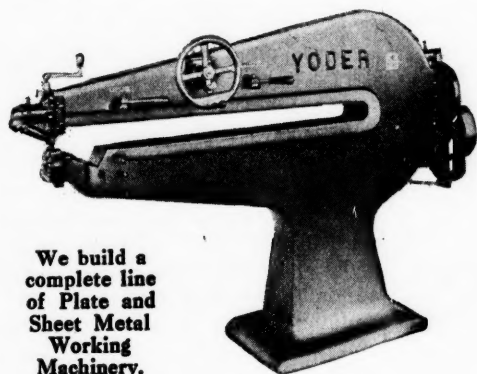
The asbestos lining in the flexible band of the Caldwell Friction Clutch is your sure guarantee of a firm grip on the friction ring and a steady power-pull with a minimum of slippage.

Simplicity of adjustment—a single screw, and ease of operation—one lever, make the Caldwell the intelligent choice for difficult service.

Send for Catalog.

W. E. Caldwell Co., Incorporated
270 E. Brandeis St., Louisville, Ky.

Caldwell
FRICTION
CLUTCHES



We build a complete line of Plate and Sheet Metal Working Machinery.

Yoder No. S-60 Rotary Shear

This shear, with 60" gap to accommodate large sheets, will cut any weight of sheet metal up to 14 gauge. It can be used for short curves in any direction and will cut circles without running in from the side of material. This machine has two speeds controlled by hand lever and is equipped with a Yoder friction clutch. Write for further information.

THE YODER COMPANY
W. 55 ST. and WALWORTH AVE. CLEVELAND, OHIO
PLATE AND SHEET METAL MACHINERY SPECIALISTS

FINANCIAL NEWS

Bond Issues Proposed

Fla., Daytona Beach—City, Newton M. Hudson, Clk., sell tax sale certificates Oct. 1.

Ga., Phenix City—City Comsn. passed ordinance calling for issuing \$25,000 refunding bonds to retire issue coming due Sept. 2.

La., Amite—School Dist. No. 107 of Tangipahoa Parish, C. C. Pittman, Supt., School Bd., opens bids Sept. 1 for \$110,000 building bonds. 8-6

La., West Monroe—City, Leon Wood, City Clk., opens bids Aug. 15 for \$75,000 waterworks bonds.

Md., Belair—Harford County Commrs., C. Clyde Spencer, Pres., opens bids Aug. 17 for \$250,000, 3½% state road construction coupon notes.

Md., Brunswick—Mayor and City Council instructed City Attorney to draw up ordinance covering sale of \$60,000 waterworks bonds. 7-16

Mo., Kansas City—City, H. P. McElroy, City Mgr., plans selling \$1,000,000 auditorium bonds in near future; City Council to act on measure Aug. 17 authorizing sale. 6-4

Md., Rockville—Montgomery County Commrs., Berry E. Clark, Clk., deferred sale of \$100,000 bonds. 7-30

Mo., Huntsville—City, C. C. Johnson, City Clk., defeated \$25,000 waterworks bonds. 7-30

N. C., Burlington—City opens bids Aug. 18, through Chas. M. Johnson, Dir. Local Government Comsn., Raleigh, for \$140,000 bonds: \$10,000 corporate purpose; \$20,000 water.

N. C., Greenville—Local Government Comsn., Chas. M. Johnson, Dir., Raleigh, opens bids Aug. 18 for \$100,000, not to exceed 6%, in multiples of ¼ of 1%, \$1000 denom. registered gas plant bonds. 8-6

N. C., Reidsville—City opens bids Aug. 18, through Chas. M. Johnson, Dir. Local Government Comsn., for \$35,000, not to exceed 6%, in multiple of ¼ of 1%, \$1000 denom. coupon water and sewer bonds.

Okla., Erick—City, B. G. Dobson, City Clk., voted \$25,000 gas distribution system bonds.

S. C., Cayce—City, reported, recently voted \$36,000 waterworks system bonds.

Tenn., Maryville—City, W. H. Willard, City Judge, voted \$20,000 sewer bonds. 7-23

Tenn., Nashville—State Funding Bd. opens bids Aug. 20 for \$500,000 building bonds for University of Tennessee and \$31,000 for completing hospital for criminal insane, Nashville.

Tex., Beaumont—Jefferson County voted \$150,000 Port Arthur sub-courthouse bonds. 7-2

Tex., Bryan—Brazos County, A. S. McSwain, County Judge, opens bids Aug. 21 for \$100,000, 5% \$1000 denom. road bonds.

Tex., Canyon—City, Harvey Cash, City Sec., voted \$18,000, 5%, \$1000 denom. water works bonds.

Tex., Dallas—City Council adopted ordinances providing for issuance of \$800,000, 4½% Love Field (airport) improvement bonds.

Tex., Lampasas—City votes Aug. 28 on \$12,000 city hall bonds.

Tex., Longview—Gregg County Commrs. hold election Aug. 22 instead of Aug. 18 on \$850,000 courthouse and jail and road bonds. 7-30

Tex., Refugio—City, J. O. West, Mayor, votes Aug. 31 on \$160,000 paving and sewer bonds. 8-6

Tex., Robert Lee—Cole County votes in near future on \$175,000 road bonds.

Bond Issues Sold

Ark., Fort Smith—City, Fagan Bourland, Mayor, sold \$100,000 bonds to City National Bank, Fort Smith, at 101.50; also \$25,000, at 101.52. 7-16

Ga., McDonough—Henry County Commrs. of Roads and Revenues, J. O. Tarpley, Clk., sold \$150,000, 5%, \$1000 denom. road improvement bonds to J. S. Hillsman & Co., Inc., Atlanta, at 106.66. 7-23

Ky., Richmond—City, reported, sold \$400,-

000 water revenue bonds to Stifel, Nicolaus & Co., St. Louis, at 98.50.

La., DeQuincy—City, M. M. Smith, Clk., sold \$20,000 town hall improvement bonds to First National Bank, Shreveport, at par, accrued interest and \$11 premium. 7-2

Mo., Valley Park—City, reported, sold \$60,000 4¾% school bonds jointly to Stern Bros. & Co. and Fidelity National Corp., both Kansas City.

N. C., Raleigh—Raleigh Graded School Dist. sold \$55,000 notes, through Local Government Comsn., Raleigh, to North Carolina Corp., Raleigh, at par with 4¾% interest.

N. C., Raleigh—City sold \$175,000 bond anticipation notes through Local Government Comsn., Chas. M. Johnson, Dir., Raleigh, to Page Trust Co., Raleigh, as 4¾s, plus \$8.75 premium.

N. C., Salisbury—Rowan County sold \$35,000 notes, through Local Government Comsn., Raleigh, to Cabarrus Bank & Trust Co., Concord, at par with 5.85% interest.

N. C., Sanford—Bd. of Aldermen authorized issuance of \$62,000 bonds for waterworks, sewers and paving.

Okla., Haskell—City, reported, sold \$45,000, 6% water works extension bonds recently to National Bank of Claremore, Claremore, at par.

S. C., Spartanburg—City, I. T. Williams, Treas., sold \$500,000, \$1000 denom. funding bonds to South Carolina National Bank, Columbia, as 5¼s, at 100.75. 7-30

Tenn., Fayetteville—City, R. L. Lindsay, Clk., sold \$40,000 5% refunding bonds to I. B. Tigrett & Co., Jackson, and American National Co., Nashville, at par, accrued interest and \$175 premium. 7-23

Tenn., Linden—Perry County Court, reported, recently sold \$30,000 refunding bonds to Equitable Securities Corp., Nashville, at par. 7-30

Tenn., Madisonville—Monroe County Court sold \$75,000 bonds to cover outstanding indebtedness, jointly to Equitable Security Corp. and Joseph Hutton & Estes, both Nashville. 7-16

Tenn., Shelbyville—City, reported, sold \$40,000, 5% refunding bonds jointly to Equitable Securities Corp. and Robinson, Webster & Gibson, both Nashville, at par.

Tex., Carrizo Springs—Dimmit County, reported, sold \$100,000, 5½% courthouse funding bonds to Graham & Co., Inc., San Antonio.

Tex., Freeport—City sold \$25,000 street improvement bonds to H. C. Burt & Co., Houston, at par.

Tex., Galveston—City recently sold \$12,000 paving bonds to Broussard, Warfield & Co., Beaumont, at par.

Tex., Morton—Cochran County, D. T. Smith, Clk., sold \$100,000 road bonds to H. C. Burt & Co., Houston, at par. 7-30

Tex., Panhandle—Carson County, reported, recently sold \$250,000 highway bonds to D. E. Dunne & Co., Wichita, at par.

Tex., Stephenville—Erath County, reported, sold \$150,000, 5¾% county bonds to H. C. Burt & Co., Houston.

Building & Loan Associations

Tenn., Memphis—Victory Building & Loan Association, Messick Bldg., chartered; H. N. Pinkerton, 2210 Court St.

New Financial Corporations

Ala., Abbeville—Bank of Abbeville, capital \$25,000, chartered; C. W. Bland, G. M. Danzey.

N. C., Brevard—J. H. Pickelsimer and associates plan opening new bank.

Bank of Black Mountain, Black Mountain, N. C., authorized by State Commr. of Banks Gurney P. Woods, Raleigh, to reopen; William C. Honeycutt, Black Mountain, elected Pres.

First National Bank, J. H. Griffith, Pres., and First National Bank, Stephen G. Gernert, Pres., both Taylor, Tex., merged.

First National Bank, E. C. Alexander, Pres., and Holston National Bank, J. B. Nave, Sr., Pres., merged; retain name of

First National Bank, with E. C. Alexander, as president of new institution.

Lonaconing Savings Bank, D. R. Sloan, Pres., acquired First National Bank, W. W. Shultice, Pres., both Lonaconing, Md.

People's Industrial Banking Corp., Hyattsville, Md., changing name to Baltimore Banking Corp. and principal office to Baltimore, Md.

Few Strikes in New Orleans

The fact that only 10 strikes, of which only three were of major importance, have occurred in New Orleans since 1922 is explained by Wilson S. Callender of the Association of Commerce as follows:

"New Orleans is generally regarded as an open-shop town and the superintendent of almost any big manufacturing plant, or any big employer of labor, will say that labor trouble is almost unknown in this city. This is due to the fact that our labor is 92 per cent intelligent, native American, and also partly due to the fact that living costs in New Orleans are 12 per cent lower than the average of American cities. On the other hand, the scale of pay in New Orleans is by no means that much below the American average."

The so-called major strikes were those of the longshoremen and the carpenters in 1923, and the streetcar men in July, 1929.

\$3,000,000 Building Progressing

Washington, D. C.—The new \$3,000,000 Agricultural Extensible Building under construction here for the Department of Agriculture is about 70 per cent complete, according to Starrett Brothers & Eken, Inc., agents and construction managers for the Metropolitan Casualty Insurance Company, Washington, which took over the construction of the building upon the failure of the contractors, to whom the general contract was originally awarded, to complete the structure. Plans and specifications for the building were prepared in the office of Jas. A. Wetmore, Acting Supervising Architect, Treasury Department.

\$3,000,000 Federal Building

St. Louis, Mo.—Plans by Mauran, Russell & Crowell, St. Louis, architects for the new \$3,000,000 Federal building here have been approved by the Treasury Department, Jas. A. Wetmore, Acting Supervising Architect. Designed primarily to fit in with a group of civic buildings adjoining the Memorial Plaza, the new building will be 10 stories and mezzanine, with set-backs at the seventh and ninth floors. The exterior will be of white stone. About 277,000 square feet of floor space will be provided.



THE BULK OF BUYING POWER OF THE SOUTH

is covered by the circulation of the *Manufacturers Record*. The men who read this paper direct the policies of their respective businesses and share in shaping the course and character of Southern industry.

Our country is on the threshold of a new era of industrial growth which promises to exceed anything of the past. Current trends indicate that a large part of the growth to come will begin and center in the South where there is abundance of labor, favorable climate and enormous wealth of raw materials.

This new period may be brought closer through aggressive advertising effort by creating a fresh spirit of optimism and by encouraging greater spending. The demand for old and new products will reappear only if consistently stimulated. Through the advertising pages of the *Manufacturers Record* sales efforts in this field may be concentrated more effectively than through any other medium, for the markets to which these efforts are directed are active markets, located in industrial centers and at points where construction activity is greatest.

The selection of a proper market for any product is a problem of major importance to its producer, but for the advertiser in the *Manufacturers Record* this problem is already solved, for a proper selection and thorough coverage are assured by the very nature of our work.

MANUFACTURERS RECORD Baltimore, Maryland

\$1,500,000 OFFICE BUILDING

Will Augment Facilities of \$26,000,000

Elevated-Surface-Subway Railway

Line Under Construction in

St. Louis

St. Louis, Mo.—Plans for the erection of a \$1,500,000 office building at Twelfth boulevard and Washington avenue have been announced by the Illinois Terminal Railroad System, following the purchase by the city of an additional 16-foot strip of land on the east side of Twelfth street, between Washington and Lucas avenues, for street widening purposes. The new building will be 11 stories, so constructed that 9 additional stories may be added later. The cost of the first unit is estimated at \$750,000. Plans and specifications are being prepared by Mauran, Russell & Crowell, St. Louis.

The first basement will provide space for a passenger station, waiting rooms

and ticket offices, and on the second basement level there will be four subway passenger train tracks. Entrance to the subway station will be through the lobby of the building and from the station level passengers will descend to subway trains. Provision has been made for two additional tracks when needed. According to A. P. Titus, vice-president of the Illinois Terminal Railroad System, station facilities are being planned to handle a large volume of passenger traffic in anticipation of increased patronage of the electrified system with a new downtown subway terminal.

Several floors of the new building will be occupied by the St. Louis offices of the company, whose headquarters are in Chicago, and the remaining space will be leased to firms distributing commodities through the organization. The structure is expected to be completed next spring—about the same time the company's \$5,000,000 warehouse and terminal, which adjoins the new office building on the north, is completed,

when the subway also is expected to be finished. These facilities are a part of a program which includes a \$26,000,000 elevated-surface-subway line and terminal development begun by the railroad two years ago. The elevated and surface portions of the line have been completed and the subway is about 50 per cent complete.

Bids on 300 Miles Roads

Baton Rouge, La.—Bids will be opened August 25 by the Louisiana Highway Commission for 52 road projects in various counties of the state, embracing a total of more than 300 miles. Proposed construction will cover 197 miles of grading and surfacing, 102 miles of grading and drainage construction, 5.9 miles of concrete and 7 miles of asphaltic treatment. Proposals will also be opened for constructing six bridges.

The South's Business

Our experience and success warrant our wanting to identify this bank further with the business and progress of the South.

Inquiries about our service will be treated as coming from friends.

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

26 South Street, Baltimore, Md.

Capital and Surplus \$1,350,000.00

Member Federal Reserve System

WE extend the facilities of our organization to those desiring information or reports on companies with which we are identified.

Electric Bond and Share Company

Two Rector Street

New York

THE OSCAR T. SMITH & SON CO.

Manufacturing

BANK AND COMMERCIAL STATIONERS

407-9-11 E. Saratoga Street

BALTIMORE, MD.

CHARACTER

QUALITY

— SERVICE —

We Buy Bonds

City, County, School and Road from Municipalities and Contractors

WRITE

THE PROVIDENT SAVINGS BANK & TRUST CO.

CINCINNATI

OHIO

W. O. GAY

H. D. MONTGOMERY

G. C. DEMOREST

CITY AND COUNTY NOTES

COMMERCIAL PAPER

COLLATERAL LOANS

W. O. GAY & CO.

Est. 1894

27 William Street, New York

53 State Street, Boston

1600 Walnut Street, Philadelphia

YOUNG & SELDEN COMPANY

MANUFACTURING

Bank and Commercial Stationers

BALTIMORE, MD.

THE growth and development of the South and Southwest demands extensive financing and banking facilities. If you are interested in enlarging your contacts in this section, may we discuss our advertising service with you?

MANUFACTURERS RECORD



PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



Bids close September 3, 1931.

U. S. Engineer Office, 300 Customhouse, Baltimore, Md. Sealed proposals will be received here until 3 P. M., Eastern Standard Time, September 3, 1931, and then publicly opened for dredging in the entrance to the Craighill Section of channel leading to Baltimore, material estimated to measure approximately 1,050,600 cubic yards, scow measure.

Bids close August 28, 1931.

OFFICE OF PUBLIC BUILDINGS AND PUBLIC PARKS, Room 1031 Navy Building, Washington, D. C. Sealed bids will be received until 11 A. M., Eastern Standard Time, August 28, 1931, for the construction of a Federal Warehouse in Washington, D. C. This building will be approximately 212 by 262 feet, with seven stories and basement, and will be constructed of reinforced concrete. All mechanical work is included. A deposit in the form of a certified check for \$100.00 will be required to secure plans. Further information upon application.

Bids close August 17, 1931.

War Department, Office Constructing Quartermaster, Fort Bragg, N. C. Sealed Proposals in triplicate will be received until 10:00 A. M., August 17, 1931, and then publicly opened, for the construction and completion of a monument at Cowpens Battlefield, Ezell, S. C. \$10.00 deposit certified check, payable to Treasurer of United States, required for plans and specifications. A certified check or Bid Bond in the amount of \$1200.00 will be required with each proposal. Further information on request.

Bids close August 20, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., August 5, 1931.—SEALED BIDS in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., August 20, 1931, for furnishing all labor and materials and performing all work for the preliminary excavation for the archives building at Washington, D. C. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding one set, may be obtained by any satisfactory general contractor at this office in the discretion of the supervising architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close September 2, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., August 5, 1931.—SEALED BIDS in duplicate subject to the conditions contained herein will be publicly opened in this office at 2 p. m., September 2, 1931, for furnishing all labor and materials and performing all work for permanent sewers and work incident thereto at the U. S. immigration station, Baltimore, Md. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications may be obtained from the custodian at the building or at this office in the discretion of the supervising architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close August 27, 1931.

U. S. Department of Agriculture, Bureau of Public Roads, Washington, D. C., August 7, 1931. SEALED BIDS will be received at the office of the Bureau of Public Roads, Washington, D. C., until 11 o'clock a. m., on August 27, 1931, for a water supply at the terminus of the Mount Vernon Memorial Highway in Fairfax County, Virginia, near the entrance to the Mount Vernon Estate, consisting of one deep well turbine pump with motor, one 25,000 gallon elevated steel tank, one centrifugal booster pump with motor, pump house, transformer vault, piping, wiring, etc. Plans, specifications and proposals may be obtained at the office of the Bureau of Public Roads, Willard Building, Washington, D. C. Thos. H. MacDonald, Chief of Bureau.

GENERAL INFORMATION

About Proposal Advertising in Manufacturers Record

PUBLICATION DAY: Thursday.
FORMS CLOSE: 10 A. M. Tuesday.

When too late to send copy by regular mail to reach us by 10 A. M. Tuesday, forward by night letter or air mail when possible

THE DAILY CONSTRUCTION BULLETIN OF THE MANUFACTURERS RECORD

Published every business day, gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Construction Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened or when daily insertions are necessary to meet legal requirements.

The rate is the same for both publications—35 cents a line each insertion.

Bids close August 31, 1931.

U. S. Engineer Office, Mobile, Ala.—Sealed bids, in duplicate, subject to the conditions contained in specifications, will be received until 11 o'clock A. M., August 31, 1931, and then publicly opened, for furnishing one direct connected diesel electric generating plant complete, as described in specifications, ready for installation. Further information upon application.

Bids close September 10, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., August 6, 1931.—SEALED BIDS, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., September 10, 1931, for furnishing all labor and materials and performing all work for the construction (except elevator and dumbwaiter) of the U. S. post office, court house, etc., at Hartford, Conn. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding six sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$50.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close August 27, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., August 5, 1931.—SEALED BIDS, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., August 27, 1931, for furnishing all labor and materials and performing all work for the excavation and foundations of the U. S. department of labor and interstate commerce commission building, including the preliminary excavation for the connecting wing, at Washington, D. C. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$25.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close September 15, 1931.

U. S. Engineer Office, Jacksonville, Fla.—Sealed bids, in duplicate, will be received here until 12 noon, Sept. 15, 1931, and then opened, for furnishing all labor and materials and performing all work for constructing approximately 35,000 linear feet of levee and navigation channel, involving the removal from the navigation channel and placing in levee of approximately 2,179,000 cubic yards of material, dragline section, or 3,064,000 cubic yards, hydraulic section, including necessary drainage structures, between Disston Island Drainage District Pumphouse No. 1, near Moore Haven, Fla., at Station 300, and extending towards Clewiston, Fla., as far as available funds will permit. Further information on application.

Bids close September 2, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., August 5, 1931.—SEALED BIDS, in duplicate subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., September 2, 1931, for furnishing all labor and materials and performing all work for the construction of the U. S. post office, etc., at Rutherfordton, N. C. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close August 18, 1931.

Maryland Highway Work

DEPARTMENT OF PUBLIC WORKS
STATE OF MARYLAND
STATE ROADS COMMISSION

NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for building two sections of State Highway as follows:

Baltimore County, Contract No. B-213-44—One section of State Highway along the Stringtown Road, from the Falls Road, at a point near Butler, toward the York Road, for a distance of 1.34 miles (Macadam)

Prince George's County, Contract No. P-186-311—One section of State Highway along the Riggs Road from the Ager Road to the Old Powder Factory Road, for a distance of 2.50 miles (Conc. Shoulders)

will be received by the State Roads Commission at its offices, Federal Reserve Bank Building, Calvert and Lexington Sts., Baltimore, Maryland, until 12 M. on the 18th day of August, 1931, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check, payable to the State Roads Commission of Maryland, as required by Sec. 6, Chapter 539, Acts of 1931, of the amount as set forth in the proposal form.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 4th day of August, 1931.

G. CLINTON UHL, Chairman.
L. H. STEUART, Secretary.

Bids close September 15, 1931.

Railroad and Highway Bridge

STATE OF LOUISIANA
AND
CITY OF NEW ORLEANS

New Orleans, La., July 21, 1931.

Sealed proposals will be received by the State of Louisiana, acting through the State Advisory Board, represented by its Chairman, Huey P. Long, and the City of New Orleans, acting through the Public Belt Railroad Commission, represented by its President, T. Semmes Walmsley, at the Council Chamber in the City Hall, New Orleans, La., until two P. M. (Central Standard Time), TUESDAY, SEPTEMBER 15, 1931, for the construction of combined railroad and highway bridge across the Mississippi River above New Orleans.

The approximate quantities of work to be performed under four contracts are given below:

Contract No. 3—Substructure—Main Bridge.

Borings 3075 lin. ft.

Caisson Foundations 133,700 cu. yds.

Concrete Footings.

Pedestals and Shafts 45,000 cu. yds.

Granite Facing 2200 cu. yds.

Excavation other than Caisson 14,900 cu. yds.

Gravel Fill 1150 cu. yds.

Timber Piles 124,500 lin. ft.

Reinforcing Steel 1,000,000 lbs.

Mattress Protection 537,500 sq. ft.

Contract No. 4—Superstructure—Main Bridge.

Structural Metalwork 39,400,000 lbs.

Heat Treated Eyebars 2,800,000 lbs.

Railway Deck Timbers Treated 550 MBM.

Concrete Roadway Slabs 3270 cu. yds.

Reinforcing Steel 225,000 lbs.

Roadway Steel Reinforcing Trusses 183,000 lin. ft.

Contract No. 5—Substructure Approaches.

Excavation for Footings 32,400 cu. yds.

Concrete in Pedestals, Footings and Abutments 24,700 cu. yds.

Reinforcing Steel 1,130,000 lbs.

Timber Piles 60' long 1,032,200 lin. ft.

Highway Embankments 25,000 cu. yds.

Bituminous Roadway Surface 8000 sq. yds.

Reinforced Concrete Pipe, 12" diam., 750 lin. ft.

Reinforced Concrete Pipe, 24" diam., 750 lin. ft.

Steel Driving Shoes for piles 5000 shoes.

Contract No. 6—Superstructure Approaches.

Structural Metalwork 78,000,000 lbs.

Railway Deck Timbers Treated 3500 MBM.

Concrete Roadway Slabs 4860 cu. yds.

Reinforcing Steel 336,000 lbs.

Roadway Steel Reinforcing Trusses 275,000 lin. ft.

Copies of the contract drawings, contract, specifications, proposals and bond may be secured from the Louisiana Highway Commission at Baton Rouge, La., or the Public Belt Railroad Commission, Municipal Building, New Orleans, La., or Modjeski, Masters and Chase, 121 East 38th Street, New York, N. Y. A deposit of fifty dollars (\$50.00) will be required to be made for each set of plans, forty dollars (\$40.00) of which will be refunded upon the return of the plans in good condition.

In addition to the surety's consent there will be required to be deposited with each bid submitted certified check in the amount shown below:

Contract No. 3—\$100,000.00

Contract No. 4—\$100,000.00

Contract No. 5—\$ 25,000.00

Contract No. 6—\$100,000.00

The State and City reserve the right to reject any or all bids, or to accept any bids which will be for the best interests of the State and the City.

STATE OF LOUISIANA,

Acting Through

STATE ADVISORY BOARD

By HUEY P. LONG, Chairman.

CITY OF NEW ORLEANS,

Acting Through

PUBLIC BELT RAILROAD COMMISSION

By T. SEMMES WALMSLEY, President.

Bids close August 18, 1931.

Steel Superstructure

DEPARTMENT OF PUBLIC WORKS
STATE OF MARYLAND

STATE ROADS COMMISSION

NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for construction of structural steel superstructure, etc., Allegany County, Contract No. A-99-62—Structural steel superstructure, etc., for bridge over C. & O. Canal on the Oldtown-Paw Paw Road from Town Creek to Paw Paw

will be received by the State Roads Commission at its offices, Federal Reserve Bank Building, Calvert and Lexington Sts., Baltimore, Maryland, until 12 M. on the 18th day of August, 1931, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check, payable to the State Roads Commission of Maryland, as required by Sec. 6, Chapter 539, Acts of 1931, of the amount as set forth in the proposal form.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 30th day of July, 1931.

G. CLINTON UHL, Chairman.

L. H. STEUART, Secretary.

CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

TIMBER AND TIMBER LANDS

FOR SALE—441,000 feet (estimate) of timber, majority original virgin, Appalachian, White Oak and Yellow Poplar, 2½ miles from U. S. Route No. 23. Call or write CHANT BRANHAM, P. M., Pound, Va.

FARM, FRUIT AND TRUCK LANDS

VIRGINIA

FOR SALE—A famous estate of about 630 acres of bluegrass and rich river bottom land known throughout Southwest Virginia as the best. Produces finest horses and cattle and all grain crops. Large dwelling of 14 rooms. Night ride from Washington. Ideal climate. Price \$140 per acre; mineral rights reserved. Address Owners, Box 66, Marion, Va.

SOUTHERN PLANTATION

GET IN TOUCH with me if you want to own one, if not the best, 2100 acre Southern plantations in the South; near Montgomery, Alabama. Only \$25 per acre. Terms. O. D. STEWART, Route 6, Boaz, Ala.

BUSINESS OPPORTUNITIES

HAVE DISCOVERED evidence of large deposits of rock salt on own property. This is near high calcium limestone. Want to hear from interested chemical companies who would prospect on agreeable terms. Address No. 9122, Manufacturers Record.

CORPORATIONS ORGANIZED—Incorporate your business under Delaware laws. Many advantages. Low cost. Quick service. Meetings can be held anywhere. Send 25 for latest corporation laws. Write Dept. 34, Corporation Fiscal Co., Wilmington, Del.

Rates, Terms and Conditions

RATES: 30 cents a line each insertion. Minimum space accepted, four lines. In estimating the cost allow six or seven words of ordinary length to line. When the advertisement contains a number of long words proper allowance should be made.

Rates for Special Contract:

100 lines 28c a line

300 lines 26c a line

500 lines or more 25c a line

TERMS: For transient advertising cash with order; check, post office or express money order or stamps accepted.

On special contract advertising bills are rendered monthly, covering space used each month, payable within ten days.

CONDITIONS. No patent medicine, oil or mining stock advertisements or questionable or undesirable advertisements will be accepted. The assistance of our readers in excluding undesirable advertisements is requested. No display type used.

BUSINESS OPPORTUNITIES

LONG TERM LOANS, large amounts, made on industrial, mercantile, sawmill properties. THOS. W. GILMER, Attorney, Bay Minette, Alabama.

MANUFACTURERS—Write for our FREE Classification Sheets of inventions for sale, covering 135 main subjects, and in one or more of which you will doubtless be interested. ADAM FISHER MFG. CO., 578 Enright, St. Louis, Mo.

BUSINESS OPPORTUNITIES

FACTORY OPERATING in the State of Georgia needs services of a young man and additional capital to the extent of \$25,000 to \$50,000. Investment will be safe and profitable. An unusually good proposition will be submitted to a person with money and brains. References will be given and expected. Address No. 9129, care of Manufacturers Record, Baltimore, Md.

MOVING AHEAD

Parkersburg has worked out of the depression. Diversified industry did it. Locate your factory here at the gateway to the Central West and South.

BOARD OF COMMERCE,
Parkersburg, West Virginia.

MAN WANTED—A Northern tapestry and drapery manufacturer opened a branch plant here, leased a building and equipped it with fifty-eight Jacquard Looms, and other machinery. The head of the firm died. The plant was closed. We have purchased the equipment, it is set up ready to run, individual motor drives. Here's an opportunity for a man who knows this business and can manage it, to get in on the ground floor. All that's necessary is a few thousand dollars and show us he's the right man.

J. W. ANDERSON CO., INC.,
Rock Hill, S. C.

MANUFACTURING SPACE

FOR RENT—Short or long time lease 14,000 sq. ft. floor space. Suited for Retail or Wholesale business or manufacturing. Located in heart of the City of Columbus, Georgia. Can furnish heat, light, water and power. Low insurance rates. Communicate with NATIONAL INVESTMENT CORPORATION, Columbus, Georgia.

INDUSTRIAL PLANTS

FOR SALE—Iron Works in Kansas, composed of Structural Steel Shop, Foundry, Machine and Sheet Iron Shop; established in 1902. Owners retiring. Annual business \$350,000 to \$400,000, net assets \$275,000. Will sell at sacrifice. Address No. 9126, care of Manufacturers Record, Baltimore, Md.

COTTON MILL

For Quick Sale
4 story, standard brick building.
28 tenant houses.
2 warehouses, one story brick.
8,512 spindles.
262 looms, 32", 36" and 40".
Powered with 360 H.P., new Diesel oil engine.
Mill has been operation since 1889.
For further information, write No. 9127, care Manufacturers Record, Baltimore, Md.

FOR SALE OR LEASE, well equipped furniture factory located in the Southeast—manufacturing bed room and dining room furniture. Raw materials secured locally. Territory embraces the southeast with most favorable freight rates. **MACON LUMBER & MFG. CO.**, Macon, Ga.

FACTORY SITES

TWO AND ONE-QUARTER MILES railroad frontage industrial sites for sale at Baton Rouge. Southern Land and Investment Company, Baton Rouge, La.

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PATENTS—Booklet free. Highest references. Best results. Promptness assured. **WATSON E. COLEMAN**, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

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PAUL B. EATON, Patent Attorney
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314 McLachlen Building, Washington, D. C.
417 Wachovia Bldg., Winston-Salem, N. C.

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SEYMOUR & BRIGHT, Registered Patent Attorneys. Established 1878. **PATENTS, TRADEMARKS, COPYRIGHTS**. Prompt and thorough service. Suite 802, National Press Building, Washington, D. C.

AGENCIES WANTED

K. C. ELLER, Machinery Dealer, 901 Central Union Bldg., Columbia, S. C. wants prices, data and dealers discount on the following: Expansion Joint, Center Strip, Culvert Pipe and Grader Blades.

REPRESENTATIVES WANTED

MEN WANTED who sell fire appliances, to handle a Gasoline Non-Explosive safety valve for use on all gasoline tanks and a line of one and five gallon Non-Explosive gasoline cans.

EMERSON ENGINEERING CORP., Alexandria, Va.

SITUATIONS WANTED

POSITION WANTED

Carpenter, foreman, capable reading and executing blueprints. Can organize and handle labor. Reference. Address No. 9128, care Manufacturers Record.

MEN WANTED

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements, your identity covered and present position protected. Established twenty-one years. Send only name and address for details.

R. W. BIXBY, INC.,
103 Downtown Bldg. Buffalo, New York

MACHINERY AND SUPPLIES

14"x6' LEBLOND LATHE, Quick change	\$300.00
36"x18' Fifeild Lathe	700.00
20"x14' Reed Lathe, Taper attachment	275.00
No. 1 1/2 Valley City Milling Machine	300.00
24" Cincinnati Shaper, Back Geared	700.00
23" Rockford Drill Press	125.00

Send us your inquiries. Secure our catalog. **CINCINNATI MACHINERY & SUPPLY CO.**, 25 West 2nd St., Cincinnati, Ohio.

MACHINERY AND SUPPLIES WANTED

Wanted—To buy used Electric Furnace, capacity about 500 pounds. Quick reply. **INTERSTATE FOUNDRY & MACHINE COMPANY**, Johnson City, Tennessee.



RESALE DEPARTMENT

MACHINERY

EQUIPMENT

SUPPLIES



PIPE

from oil plant
50 tons 6" black (used)
in perfect condition.
Lengths 16' and over.

Newark Compressed Steel Corp.
East Ferry St. and Manufacturers Pl.
Newark, N. J.

WANTED

Steam Turbo Generator Outfit
200 to 300 KVA without switchboard;
in good condition ready for immediate
delivery. Address:

J. M. Griffin Lumber Company,
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RANDLE

OFFERS BIG BARGAINS IN

Used and Rebuilt Steam and Electric Machinery
of all kinds—Boilers—Machine Tools, etc.

Send for new Machinery List.
The RANDLE MACHINERY CO.
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"ROCKFORD REBUILT"
SLIP RING MOTORS

3 Phase—60 Cycle

25 H.P.	900 R.P.M.	220 Volt	Gen.	Elec.
35 H.P.	1200 R.P.M.	440 Volt	Gen.	Elec.
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50 H.P.	900 R.P.M.	220 Volt	Gen.	Elec.
75 H.P.	900 R.P.M.	440 Volt	Gen.	Elec.
100 H.P.	900 R.P.M.	220 Volt	Gen.	Elec.
125 H.P.	514 R.P.M.	440 Volt	Gen.	Elec.
150 H.P.	514 R.P.M.	2300 Volt	Gen.	Elec.
200 H.P.	514 R.P.M.	440 Volt	Gen.	Elec.
250 H.P.	514 R.P.M.	440 Volt	Gen.	Elec.

Hundreds of other machines. A.C. and D.C. squirrel cage, synchronous, etc., available for immediate shipment, all completely rebuilt and fully guaranteed. Complete stock list—Bulletin No. 39 mailed free on request.

Rockford Power Machinery Company
626 Sixth St. Rockford, Ill.

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SALES AND REPAIR SERVICE

Quick Delivery and Low Prices

A complete stock of transformers 1 to 1000 kva. Modern methods make our repair service second to none. Special service on breakdown jobs.

All transformers guaranteed for one year.
Write for Catalog. No. 125-E.

The Electric Service Company, Inc.
"America's Used Transformer Clearing House"
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STEEL BUILDING FRAME

60' wide, 180' long, 24' high. Also independent runway and 10 ton Niles A.C. Crane.
Near Roanoke, Va. Excellent Condition, marked for re-erection. Quick shipment. Low price.
Also splendid lot of Shepard A. C. Hoists, 1 to 6 tons.

N. B. PAYNE & CO.
25 Church St. N. Y. C.

FOR SALE

29 U Williams & White Bulldozer—Double Friction Reversible Clutch Drive—M.D.
Stephen-Adamson Car Puller Style 999—Belt Driven
Also Style 999A-M.D.
Ellis Dryer & Feeder
50 KVA Westgh. 3/60/2400 Gentr. Direct connected to 10x12 L. H. Harrisburg Fleming Engine.

Arthur S. Partridge—417 Pine Street—St. Louis

FOR SALE AT A BARGAIN

4— OPEN HEARTH STEEL DROP
FORGING DIE BLOCKS.

EACH 34" X 34" X 20". MAY BE CUT
TO SMALLER SIZES.

Steel analysis:-

Carbon 0.62, Manganese 0.65, Phosphorus
0.029, Sulphur 0.034, Silicon 0.24.

TENNESSEE EASTMAN CORPORATION

Owners

KINGSPORT, TENN.

Second Hand and New **PIPE** Overhauled New Threads and Couplings

Also Cut to Sketch

Greenpoint Iron & Pipe Co., Inc.
187-205 Maspeth Ave. Brooklyn, N. Y.

PIPE NEW
SECOND HAND
Overhauled and Tested
New Threads and Couplings
Established 1904

**Albert & Davidson
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Second Ave., 50th-51st St., Brooklyn, N. Y.
Telephone Sunset 1900

SATISFACTION

ALBERT PIPE SUPPLY CO., INC.

NEW-RECLAIMED-USED

PIPE

ALL SIZES CUT TO SKETCH
AND STOCKED

BERRY & NORTH 13th STS.
BROOKLYN, N.Y.

GUARANTEED

SERVICE PRICES

FIRE PUMP

750 gallon Worthington Underwriters Centrifugal Fire Pump, 100 lb. pressure, electric motor driven, 75 H.P. 220/440 volt, 3 phase, 660 cycle motor.

Large assortment motor driven centrifugal pumps. Advise capacity and pressure wanted.

GENERATOR SETS

200 KVA 220 volt, 3 phase, 660 cycle Burke with Filer Stowell uniflow engine.

2-50 KVA 220 volt, 3 phase, 60 cycle Ridgway with Ridgway engine.

AIR COMPRESSOR

676 cu. ft. Ingersoll Rand 2 stage motor driven air compressor.

New stock List G-77 now ready. Copy mailed on request.

O'BRIEN

Machinery Company

115 N. Third St. Philadelphia



Large quantity new and used Government material in excellent condition, ready for immediate shipment. Low prices.

CENTRAL PIPE & SUPPLY CO.

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PIPE

Rethreaded, reconditioned, guaranteed suitable for all practical purposes, furnished with new threads and couplings, 400,000 ft. in all sizes from 24" to 3/4" diam.

5000 ft. 8" NEW GALVANIZED CORRUGATED pipe in lengths 16 to 20 ft. suitable for exhaust drains, water systems, sewers, conduits, etc., complete with necessary sleeves.

Very attractive prices.

Marine Metal & Supply Co.

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EDGE MOOR WATER
TUBE BOILERS

(A.S.M.E. Code)

2-737 hp. Edge Moor water tube boilers, built for 200 lb. working pressure, equipped with Foster superheaters for 100° superheat, and Wetzel stokers. Installed 1925; excellent condition. Boilers now in operation at Hershey, Pa.; can be released about August 15. For particulars, address

Hershey Chocolate Corp.
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BOILERS

High pressure water tube and H B T boilers at unbelievable prices. We have them in practically every southern state and are scrapping all but the very best. Write us your requirements.

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GANTRY CRANE

Link Belt Type A. E. G. Four Wheel Electrically Operated Revolving Gantry Crane. Capacity at 45' radius: 8000 lbs.; at 12' radius: 43,000 lbs. 1 1/4 yd. capacity Blaw-Knox bucket. Adaptable for handling single-hook, hook-block, self-filling grab bucket, drag line bucket, electric lifting magnet, grapple, etc. Full particulars and price upon request.

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Dock and Commodity Dept.
Houston, Texas

FOR SALE

- 6—125 ton Erie Aggregate Bins.
 - 3—7S Knickerbocker Concrete Mixers, Power Loader, Water Tank.
 - 4—7S Knickerbocker Concrete Mixers, Hopper Loader.
 - 1—No. 10 Republic Concrete Mixer, Power Loader, Water Tank.
 - 2—No. 10 Republic Concrete Mixer, Hopper Loader.
 - All Mixers New—Equipped Le Roi Gas Engines
 - 2—No. 4 Republic Mixers—Trailer type—New.
 - 2—No. 4 Republic Mixers—4 steel wheels—New.
 - 1—1000-lb. Barrett Portable Elevator—Hand operated.
 - 2—Lewis Sheppard Jack Lifts, 2500-lb. capacity.
 - 1—Power Cement Sack Cleaner.
 - 1—Cleveland Power Bar Cutter Type E F.
 - Cut Bars up to 1 1/4 inch.
 - 25 sections Mathews Brick Conveyors.
 - 2 Curves Mathews Brick Conveyors.
 - 1 Bradley Stencil Cutting Machine.
 - 2 Bookkeeping Machines—motor equipped.
 - 3 Large White Stake Body Trucks.
 - 2 Large White Dump Body Trucks.
- All above can be bought reasonably cheap on account of liquidation.

BAKER & HOLMES CO.

Phone 5-7816

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FOR SALE

P. & H. Model 306, 3/4-yd. Dragline.
Byers, 10-ton Caterpillar Crane, 3/4-yd. Clam.
O. & S. 22 1/2-ton Loco. Crane 50' Boom.
16—12-yd. Western Steel Beam Dump Cars.
10—50-ton capst. All Steel Twin Hopper Cars.
75-ton, 20x26" 4-Driver Switcher, A. & M. E.
50-ton, 18x24" 4-Driver Switcher.
92-ton, 30 1/2x28" Mikado (2-8-2) BUILT 1922.
25-ton, 18x20" 4-Driver Sed. Tank.
56-ton, 18x24" 4-Driver Sed. Tank.

WE HAVE OVER FORTY LOCOMOTIVES IN STOCK. REBUILT AND READY ALL TYPES. 10 TO 100 TONS

Southern Iron & Equipment Co.,
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Steel Railroad Bridge

consisting of two spans 150 ft. each, Cooper's Class E-40 Loading. Has been in use only short time. Steel bolts used instead of rivets. This bridge in A-1 condition.

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Let us know your needs. We may have material in stock near you.

WE BUY RAILS FIT TO RE-LAY
ROBINSON & ORR

Columbia Bldg., 248 Fourth Ave., Pittsburgh, Pa.
New Frogs and Switches at low prices.

RELAYING RAILS—SWITCHES TRACK MATERIAL

THE PERRY BUXTON DOANE CO.

P. O. Box 5253

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STEEL SHEET PILING

NEW and USED

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Dispose of Your Idle Machinery

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RECORD

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36" PORTABLE TRACK

25 lb. rails—7 steel ties per 15 ft. section. Over ten miles, located Ocala, Fla. Also locomotives, cars, cranes and shovels.

Write us or have your local dealer do so.

EQUIPMENT CORPORATION OF AMERICA
1166 So. Washnaw Ave., Chicago

Track Scales, Water Tank, etc., Railroad Crossing For Sale

1—Fairbanks 200,000 lb. capacity Standard Gauge Track Scales, complete.

1—75,000 gallon Steel Water Tank mounted on 90' steel latticed tower, complete and in first-class condition, with stand pipe.

1—Automatic cabin Interlocking, late type Railroad Crossing, 90-lb. rail, 90 degree angle single track. Complete and in first-class condition.

T. G. ADAMS MACHINERY CO.

220 W. Bay St., Savannah, Ga.
P. O. Box 1597

Shovels or Cranes

FOR SALE

1—Factory rebuilt Lima 1 1/4 cu. yd. capacity. This machine can be equipped with either shovel, clamshell, dragline or drag shovel attachments. Very reasonably priced. Carries new machine guarantee. Located at Newark, N. J.

1—GENERAL 1/2-yd. combination shovel, backhoe, 2 buckets, and crane boom. Very good condition, located Long Island.

1—GA-2 Erie Gas Air Shovel. Fine condition and bargain. Located Newark, N. J.

1—Complete Shovel Attachment for Type "O" Thew. Also, attachment for Type B and B-2 Eries located in New Jersey. Decided bargains.

1—P & H 1 1/4 yd. Gas Shovel. Excellent condition, very attractive price. Located Newark, N. J.

1—Linn Tractor, 6 yd. capacity, with Waukesha Motor. Machine in very good condition. Priced to sell quickly. Located New York State.

1—Koehring 3/4 yd. Shovel. Excellent condition throughout. Located Newark, N. J.

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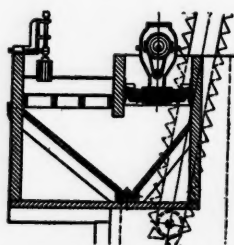


Manufacturers of Rails, Frogs, Switches, for Permanent and Portable Track. Complete line of Steel Posts for Fence and other purposes.

Catalog will be sent on request

SWEET'S STEEL COMPANY
MANUFACTURERS
WILLIAMSPORT PENNA.

Coal Producers Make Money With ELMORE COAL JIGS



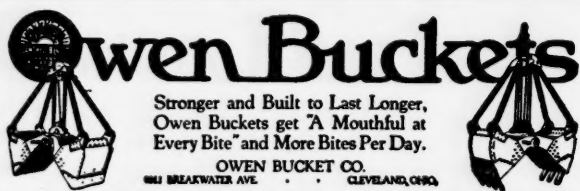
These Jigs clean your fine coal. Merchantable coal insures steady customers and assures profits.

This is a single compartment jig for both Anthracite and Bituminous coal. A dewatering bucket elevator, is provided for removing the refuse from the jig tank. A screw conveyor removes the fines from the hutch of the jig to the boot of the elevator.

Write us for information and prices

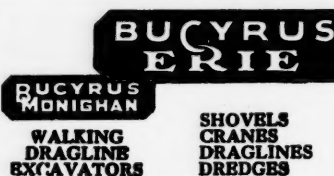
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600-A, 600-B.

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Stronger and Built to Last Longer, Owen Buckets get 'A Mouthful at Every Bite' and More Bites Per Day.

OWEN BUCKET CO.
1411 BREAKWATER AVE. CLEVELAND, OHIO



Reliability!

Bucyrus-Erie are cutting costs in every part of the world. All sizes, types and powers of excavators. Railway cranes and "Lead-master."

Bucyrus-Erie Co.
South Milwaukee, Wisconsin



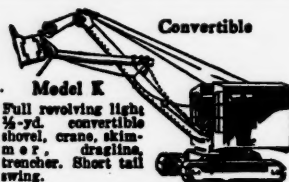
WILLIAMS BUCKETS-TRAILERS

Write us for detailed information on this profit making equipment.

G. H. Williams
Company

622 Haybarger Lane
Erie, Pa.

Branch Offices: New York, Pittsburgh, Cleveland, Chicago



Convertible

Model K
Full revolving light
1/4-yd. convertible
shovel, crane, skim-
mer, dragline,
trencher. Short tail
swing.

POWER SHOVELS Cranes, Trenchers SKIMMERS

Full or part circle

BAY CITY SHOVELS, Inc.
Bay City, Mich.

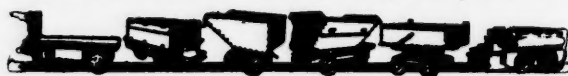


BOTTOM DUMPING and TURN-OVER BUCKETS

Write us for information on
Contractors Buckets

G. L. Stuebner Iron Works, Inc.
Manufacturers of Material Handling Equipment
So. Hancock St. Long Island City, N. Y.

INDUSTRIAL CAR EQUIPMENT



THE ATLAS CAR & MANUFACTURING CO.
Cleveland, Ohio



CEMENT GUN CONSTRUCTION CO.

CONCRETE

16 years experience placing sand and cement mortar with compressed air. Call our Engineering or Contracting Department for service.

537 S. Dearborn St. Oliver Building Woolworth Bldg.
CHICAGO PITTSBURGH NEW YORK

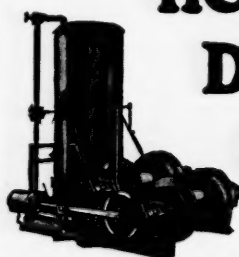


TARPAULINS · TENTS ROLL DUCK and BURLAP

It will pay contractors and manufacturers to get our prices. Write our nearest plant today.

Fulton Bag & Cotton Mills

Atlanta St. Louis Dallas
Minneapolis Brooklyn New Orleans Kansas City, Kan.



HOISTS DERRICKS CABLEWAYS

AN INQUIRY WILL NOT
INCUR AN OBLIGATION

STREET BROS. MACHINE WKS. INC.
Chattanooga, Tenn.

Stop the Leaks

In the construction of Dart Unions, the spherically constructed Bronze to Bronze seats eliminate the possibility of a leak. Extra heavy iron ends add strength and durability. Every Union is tested, and we guarantee to replace any defective union returned to us with two perfect ones.

We will mail you a free sample on request.

A shape and size to fit every need. Flanges, L's, T's, etc.



**DART
UNIONS**

E. M. DART MFG. CO., Providence, R. I.
The Fairbanks Co., Sales Agent.
Dart Union Co., Ltd., Toronto, Canada.

UPSTAIRS

IN THE WORLD



THIS "Caterpillar" Sixty runs the rock crusher for Bechtel Bros.—far up in the high Sierras where it costs \$60,000 a mile to carve out a road. The "Caterpillar" moves heavy machinery into place, pulls stumps, strips overburden—then runs the plant. Other "Caterpillars" build the road. Grades and altitude, bad weather and poor going, hard rock and soft sand—"Caterpillars" conquer all.

Prices—f. o. b. Peoria, Illinois			
TEN . . .	\$1100	TWENTY . .	\$1900
FIFTEEN . .	\$1450	THIRTY . .	\$2375
SIXTY	\$4175		

Caterpillar Tractor Co.

PEORIA, ILLINOIS, U. S. A.

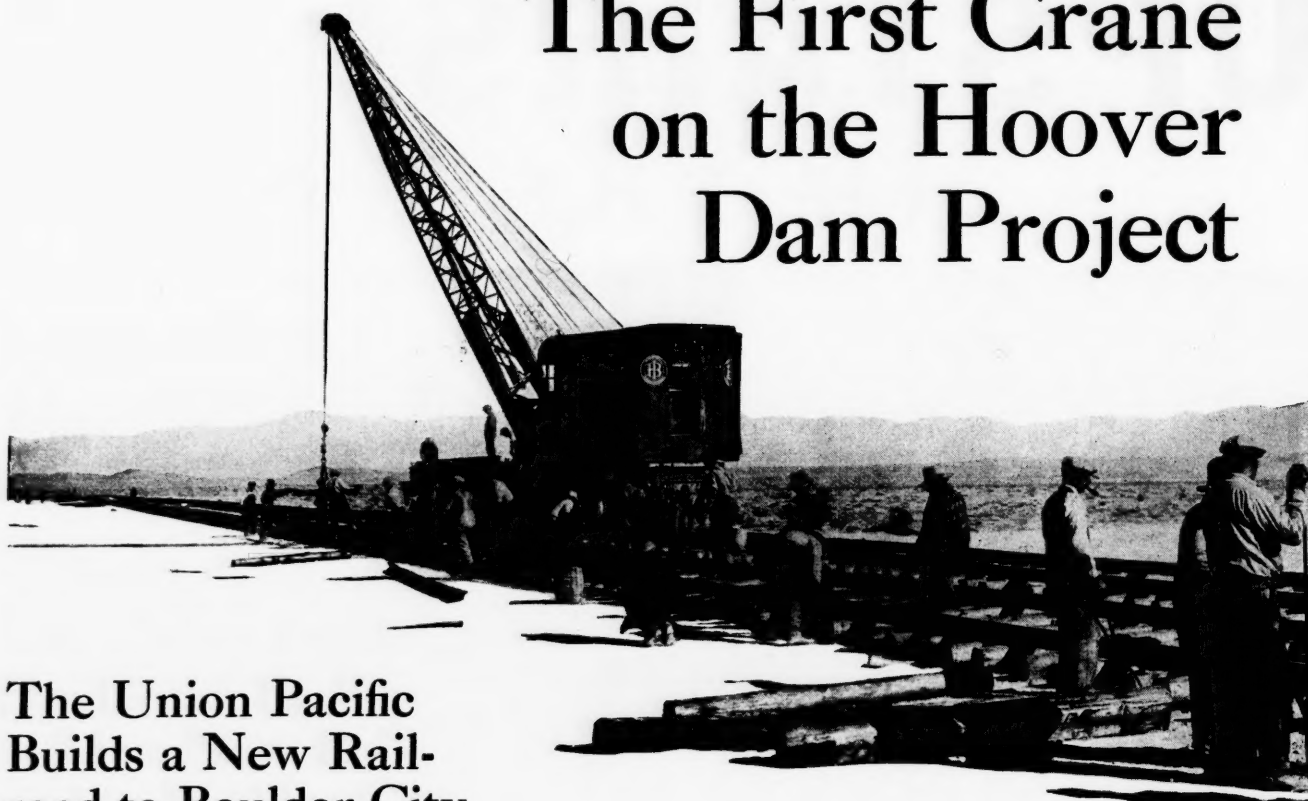
Track-type Tractors Combines Road Machinery
(There's a "Caterpillar" Dealer Near You)

CATERPILLAR

REG. U. S. PAT. OFF.

T R A C T O R

The First Crane on the Hoover Dam Project



The Union Pacific Builds a New Rail- road to Boulder City

The building of a 22-mile railroad across the Nevada desert to Boulder City was the first unit let on the Hoover Dam project. This contract was awarded to the Union Pacific Railroad and the illustration shows their first equipment to go over the rails—a No. 5 Industrial Brownhoist gas locomotive crane.

Laying ninety-pound rail, this Industrial Brownhoist averaged a mile a day for the last half of the work. In one eight-hour day 5680 feet were laid and this record could have been increased by several hundred feet had the rail been available.

Ask any Industrial Brownhoist owner, and there are thousands of them, about the uninterrupted, low cost handling service obtained from these cranes. Their universal reply of satisfactory performance is the reason, of course, why these cranes are seen wherever important jobs are under way. It is the reason, too, why you would find an Industrial Brownhoist a big money saver on your own handling work.

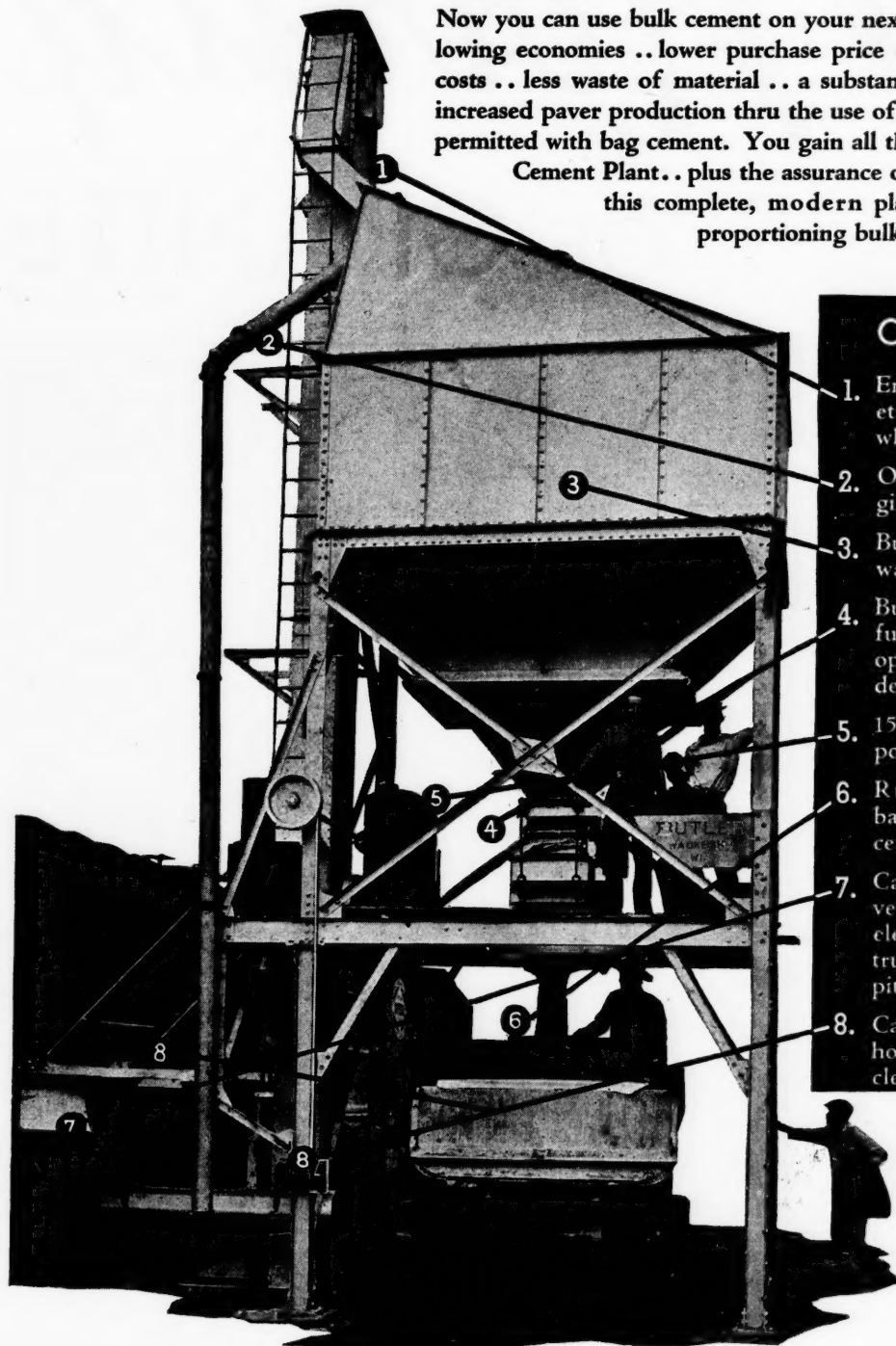
Industrial Brownhoist Corporation, General Offices, Cleveland, Ohio
District Offices: New York, Philadelphia, Pittsburgh, Detroit, Chicago, New Orleans, San Francisco, Cleveland.

INDUSTRIAL BROWNHOIST

BUTLER BULK CEMENT PLANT

A Complete Portable Unit Consisting of Elevator, Power Shovel, Storage Bin and Weighing Batcher

Now you can use bulk cement on your next job and save money thru the following economies .. lower purchase price of bulk cement .. reduced handling costs .. less waste of material .. a substantial saving in truck-loading time .. increased paver production thru the use of "split-bag batches" not ordinarily permitted with bag cement. You gain all these advantages with a Butler Bulk Cement Plant .. plus the assurance of the Butler guarantee which covers this complete, modern plant for unloading, storing and proportioning bulk cement.



Check These Features

1. Enclosed Bucket Elevator — buckets do not have to be removed when elevator is moved.
2. Overflow Spout, prevents clogging of elevator when bin is full.
3. Butler Portable Cement Bin with water-tight steel roof.
4. Butler Cement Weighing Hopper, furnished with either manually operated or automatic weighing device.
5. 15 H. P. Gasoline Engine, operates power shovel and bucket elevator.
6. Rubber Discharge Spout from batcher to truck, prevents loss of cement thru blowing.
7. Car-door Hopper and Screw Conveyor, conveys cement to base of elevator. Easily converted for truck hauling of bulk cement. No pit required.
8. Cables and Winch, lift car-door hopper and screw for switching clearance.

For further information on Butler Bulk Cement Plants, write for literature and name of nearest distributor.

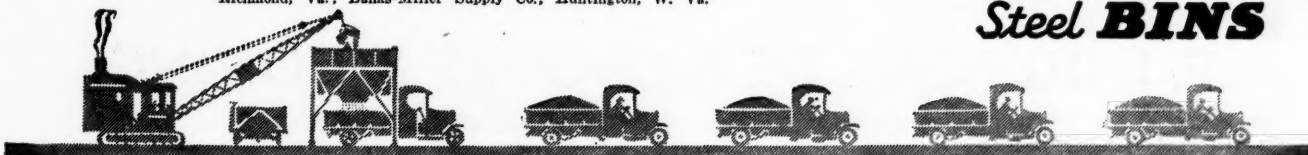
Distributors in over fifty cities.
BUTLER BIN CO., Waukesha, Wis.

DISTRIBUTORS

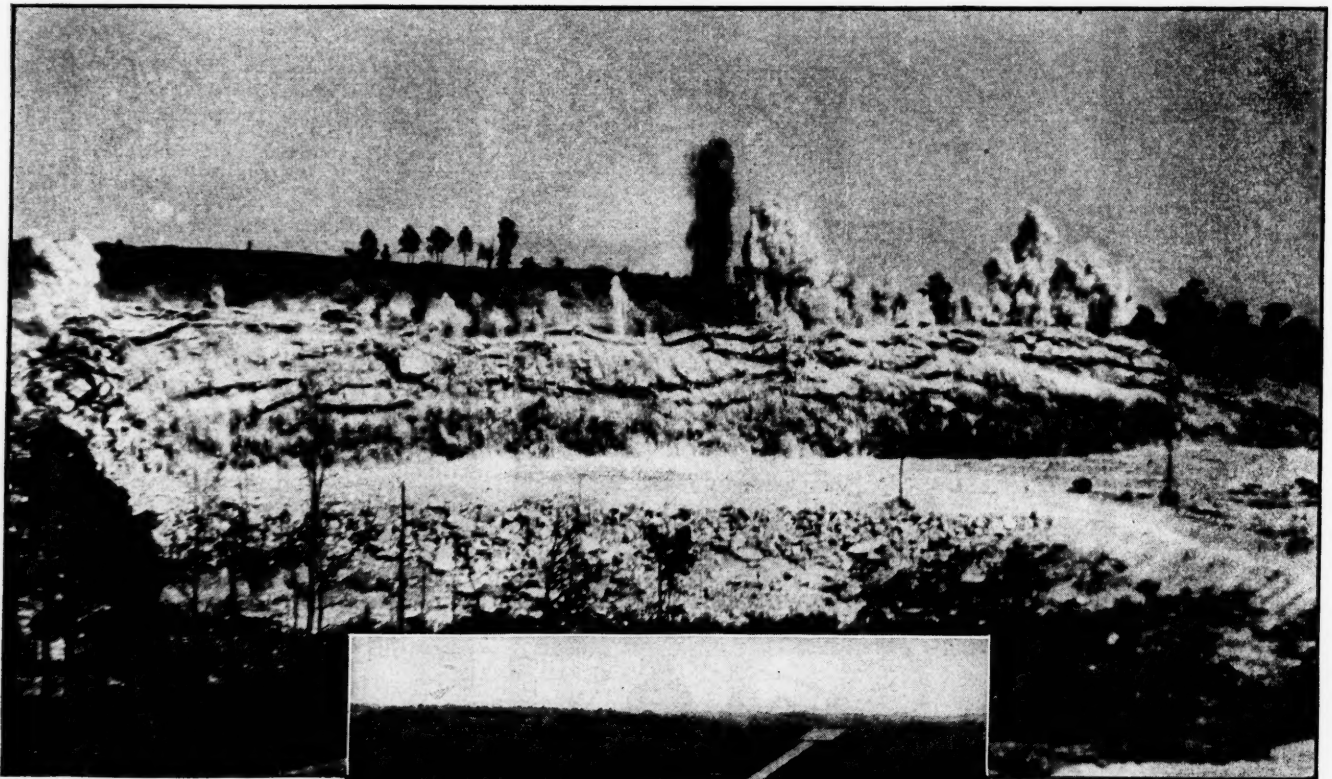
R. S. Armstrong & Bros., Atlanta, Ga.; I. E. Schilling Co., Miami, Fla.; Standard Mach. & Equip. Co., Spartanburg, S. C.; John D. Turner, Birmingham, Ala.; Burton Franklin Co., Chattanooga, Tenn.; Hewitt-Phelps Mach. Co., St. Petersburg, Fla.; Choctaw Culvert Mach. Co., Memphis, Tenn.; Fletcher Equipment Co., New Orleans, La.; Alamo Iron Works, San Antonio, Corpus Christi, Brownsville, Texas; S. G. Hawkins Co., Houston, Texas; John C. Lewis Co., Baltimore, Md.; Smith-Courtney Co., Richmond, Va.; Banks-Miller Supply Co., Huntington, W. Va.



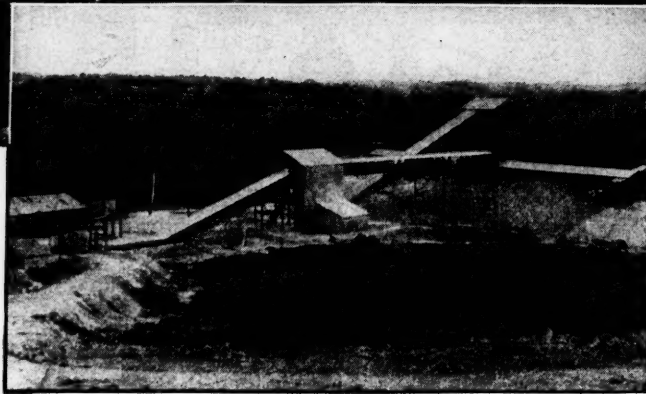
BUTLER
Steel BINS



Moving OF GRANITE



*(Above) A view of the
blasts on Rock Chapel
Mountain*



*(Left) The Rock Chapel
Plant of the Consolidated
Quarries Corporation*



E. I. DU PONT DE NEMOURS & CO., INC.

EXPLOSIVES DEPARTMENT

• WILMINGTON, DELAWARE

a mountain WITH DU PONT EXPLOSIVES

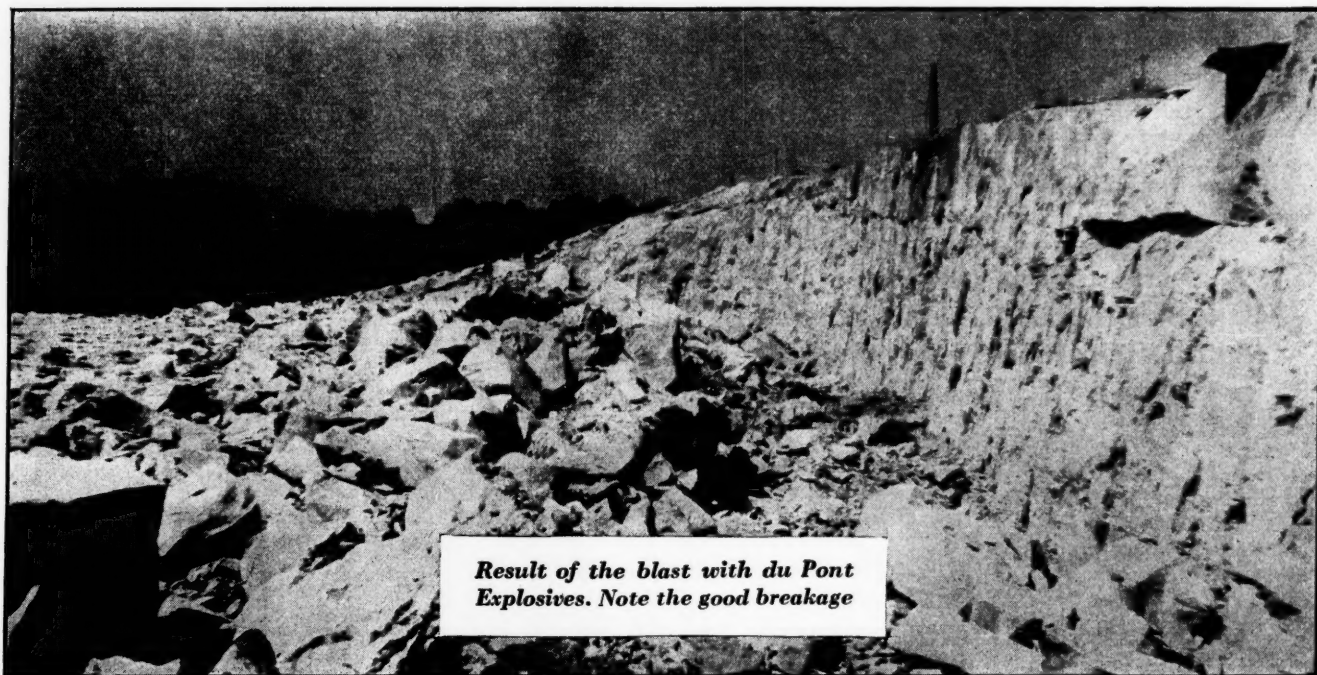
Consolidated Quarries Corporation at Lithonia, Georgia,
uses these famous explosives for efficiency in
operation and good breakage

THE deposit from which the Consolidated Quarries Corporation secures its material is a huge outcrop of granite known as Rock Chapel Mountain. It is located about ten miles southeast of the famous Stone Mountain.

One of the largest blasts ever made in Georgia was made in this quarry on March 16, 1931. It brought down 80,000 tons of granite. It was a single-row bank shot of 42 holes loaded with du Pont Dynamite. The holes were spaced 18 feet apart, with a burden of 20 feet, and averaged 70 feet in depth. From the photograph below, it is evident that the breakage was unusually good.

Whatever *your* blasting job you'll find there's a du Pont Explosive made especially for it. When you specify du Pont Explosives for the jobs you undertake you specify explosives into whose making has gone more than 129 years of experience. With du Pont Explosives you are assured of satisfactory execution.

Complete information about du Pont Explosives and their use in quarrying and for other purposes may be obtained by writing direct to the du Pont Company. We shall be glad to place your name on our mailing list to receive our Explosive Service Bulletins.



*Result of the blast with du Pont
Explosives. Note the good breakage*

We produce in quantities to meet your requirements

SAND and WASHED GRAVEL

QUICK shipments by rail from Baltimore and North East, Md. or in scow and barge lots. Truck or rail shipments from Baltimore, Md.

The Arundel Corporation

MAIN OFFICE: ARUNDEL BUILDING
BALTIMORE, MARYLAND

Branches: New York, Norfolk and Miami



for economy and permanence in Road Building and General Construction

WOODSTOCK SLAG CORP.

Southern Railway Bldg., Birmingham, Ala.

SAND—GRAVEL—BRICK FILTER GRAVEL

Washed Sand and Gravel for Concrete Roads and Buildings

Filter Gravel, all sizes—Building Bricks

FRIEND & CO., INC. River St., Petersburg, Va.

CRUSHED LIMESTONE Best for All Purposes

We manufacture all sizes of stone suitable for all classes of road building and concrete work where only a high-grade limestone is required.

Quarries opened up in 1912.

Capacity 8000 tons daily.

Four Quarries

Blue Ridge, Va. Pembroke, Va. Pounding Mill, Va.
Boxley, Greenville County, Va.

W. W. BOXLEY & COMPANY

Room 711, Boxley Building, - ROANOKE, VA.

**Crushed Stone
Mascot Chatts Roofing Gravel
Asphaltic Roadway Gravel
Asphalt Filler Dust**



AMERICAN LIMESTONE COMPANY
KNOXVILLE TENNESSEE



NO-NOX ETHYL

Stops Knocks

...eliminates even the faintest click or ping. This assures a lightning getaway in traffic with a smooth fast pick up—makes traffic a pleasure.

At the
Sign of
the
Orange
Disc

NO-NOX ETHYL has an extremely low end point which gives it an instant vaporizing quality for quick easy starting on coldest days.

GULF REFINING CO.

DUSTDOWN

SETTLES THE DUST PROBLEM

Better and costs less than oil or straight calcium chloride. Unexcelled for gravel and dirt roads, parks, cemeteries, and private driveways.

J. Q. DICKINSON & CO., MALDEN, W. VA.

ASPHALT PLANTS

**THE SIMPLICITY
SYSTEM COMPANY**

CHATTANOOGA, TENNESSEE

Tamping Costs Go Down!

There's far less time put in on hand tamping when you put down the asphalt with an ERIE Roller—

Better clearance, easier steering, shorter turning radius allow the ERIE to get into the close places and compact the asphalt close to curbs, corners, man-holes, etc.

Write today for Bulletin "M".

ERIE MACHINE SHOPS
Erie, Pa.



ERIE ROLLERS
Since 1895

To the MANUFACTURER and DISTRIBUTOR

Abundant supplies of coal, coke, iron, timber and other raw materials lie in the regions of Georgia and Alabama, which are traversed by the

Central of Georgia Railway

Cheap electric power, numerous undeveloped water-powers, good home markets and excellent shipping facilities. Therefore, manufacturing conditions are ideal.

Many of the cities on the Central of Georgia Railway occupy advantageous positions for distributing warehouses, and a number of the larger northern and eastern manufacturers supply their southeastern trade from branch houses in these cities.

Full and detailed information upon application.

J. M. MALLORY, General Industrial Agent

413 West Liberty St.

SAVANNAH, GEORGIA

LAND For Sale or Rent On EAST COAST of FLORIDA

Small or large tracts

For—Dairying

—Cattle Raising

—Truck Growing

—Citrus Fruits

—General Farming

Let us know your requirements

MODEL LAND COMPANY

Flagler System

St. Augustine—Florida

*The late Henry M. Flagler and his organizations have served
Florida since 1886*

Architects!

Contractors!

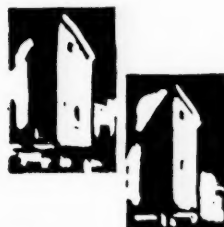
Manufacturers!

Engineers!

Builders!

PRESENT day competition is too keen to ignore advance news of developments in your field. The value of this news depends entirely upon receiving it quickly. The DAILY CONSTRUCTION BULLETIN has proven its worth by satisfactorily filling this requirement for its many Southern subscribers. Real opportunities for an increase in the volume of your business are offered in each issue of the

Daily Construction Bulletin



Hotels of Distinction

mayfair

8th and st. charles

Lennox

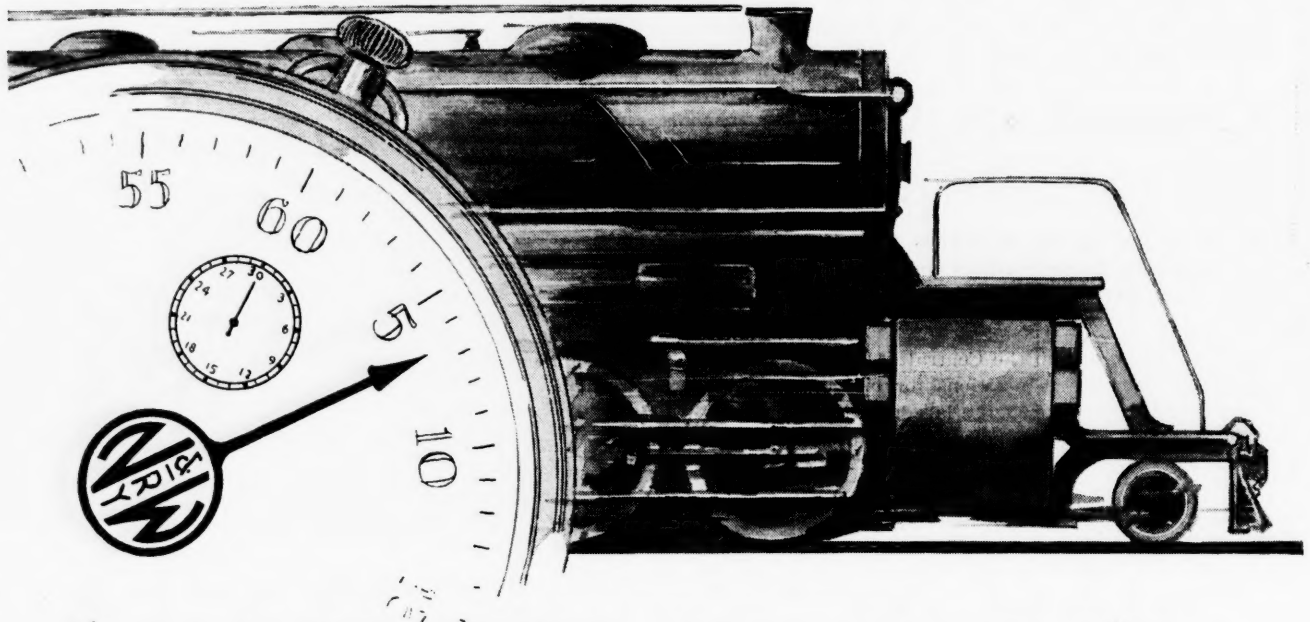
9th and washington

in st. Louis

IN the center of shopping and theatre district. Bed lamp, floor lamp . . . hand-set telephone, fans, circulating ice water, in every room. Club meals, Garage Service, Coffee Shop. Room and Bath \$3.00 to \$4.50

IN THE

TEMPO OF 1931



A year ago, four daily through freight trains of the Norfolk and Western Railway, operating between Columbus and Cincinnati in the Mid-West, and the Virginias and Carolinas and the Atlantic Seaboard in the East, made their westward runs of more than 650 miles in 44 and 44½ hours — and their eastward runs in 41½ and 47 hours. These figures represented savings of from 5 to 13 hours over their previous schedules.

Notwithstanding the rapid pace of commerce during 1930, economists and business men predicted that both industry and the transportation that served it might be expected to gain further momentum in 1931. Today, this prediction of

faster time is being realized. Norfolk and Western westward trains "The Caravan" and "The Nomad" now make their runs in 37 and 44½ hours — and the eastward trains, "The Skipper" and "The Pilot" now make their runs in 41½ and 43½ hours. It is the faster tempo of 1931. To you and to other shippers and receivers of freight, it means additional savings in time.

Continued improvements in service, increases in power and equipment, better roadbed, yard and terminal facilities, combined with the far-famed Norfolk and Western Spirit, renew assurances to shippers and receivers of freight that this is a modern transportation system.

Representatives of the Freight Traffic Department of the Norfolk and Western Railway, located in principal cities throughout the nation, will gladly give information relative to rates, routes and service

NORFOLK AND WESTERN
RAILWAY
 ROANOKE, VIRGINIA



"While the cost of operation will perhaps run slightly above that of coal, we will effect a saving in laundry bills for cleaning curtains, etc., that will offset this difference appreciably. The saving in labor and inconvenience over the coal furnace cannot be computed in dollars and cents.

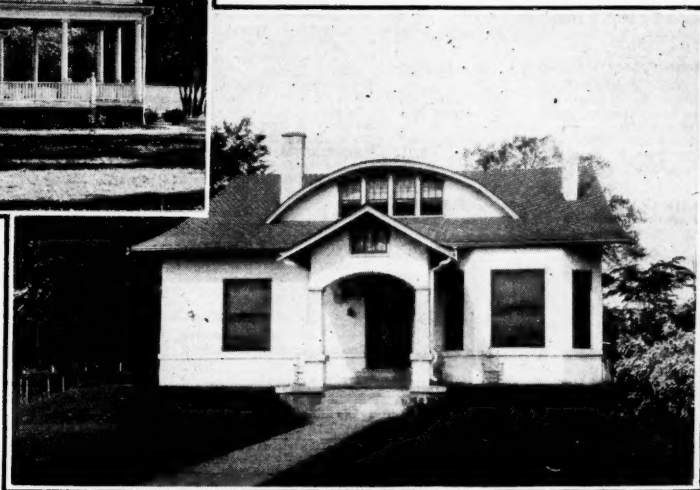
"Yours very truly,
"E. B. Cromwell."

West Point, Miss.
April 22, 1931.

"I am pleased with the operation of my gas conversion job, and the cleanliness and free-from-worry factor should appeal to the most discriminating house-keeper or business-woman.

"Yours very truly
"W. J. Staggers."

West Point, Miss.
April 22, 1931.



Home Heating With Natural-GAS Means Cleanliness, Comfort & Convenience

Here are two of the many homes in the Southeast now heated with natural gas. These two are in West Point, Miss., where natural gas is distributed by the Mississippi Natural Gas Corporation, and their owners are highly pleased with their modern fuel.

Through independent distributing companies, Southern Natural Gas Corporation is furnishing gas for both industrial and domestic use along a 1200 mile pipe line stretching across central Mississippi, Alabama and Georgia.

Natural gas is the ideal fuel for home heating . . . because it is clean and convenient. There is no soot and no smoke. It makes room temperatures uniform and easily regulated, either manually or automatically. There is nothing to shovel into your furnace, and no ashes to haul away.

Complete information on the use of natural gas in your home, or your factory, will be furnished without obligation. Write to



SOUTHERN NATURAL GAS CORPORATION

WATTS BUILDING
BIRMINGHAM, ALA



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Carborundum Co., Niagara Falls, N. Y.

ACCOUNTANTS (Cert. and Cost.)

Audit Company of the South, Atlanta, Ga.
Ernst & Ernst, New York, N. Y.

AERIAL TOWERS.

LeBourg, A., Gadsden, Ala.

AIR COMPRESSORS (Stationary and Portable.)

Armstrong & Bro. Co., R. S., Atlanta, Ga.
De Laval Steam Turbine Co., Trenton, N. J.
General Electric Co., Schenectady, N. Y.
Quincy Compressor Co., Quincy, Ill.
Westinghouse Traction Brake Co., Wilmerding, Pa.

AIR CONDITIONING SYSTEMS.

Niagara Blower Co., New York, N. Y.

AIR HEATERS.

Babcock & Wilcox Co., New York.

AIRLOCKS.

Alco Products, Inc., New York, N. Y.

ANGLE IRON-WORKING MACHINERY.

Whitney Metal Tool Co., Rockford, Ill.

APPRAISERS.

Conard, William R., Burlington, N. J.
Main, Inc., Chas. T., Boston, Mass.

ARCHITECTS.

Chase, Wm., J. J., Atlanta.
Main, Inc., Chas. T., Boston, Mass.
Milburn, Heister & Co., Wash., D. C.
Moyer Co., Tilghman, Allentown, Pa.
Freacher & Co., Inc., G. Lloyd, Atlanta.
Stirline & Co., J. E., Greenville, S. C.
Wheeler, Walter H., Minneapolis, Minn.

ARCHITECTS' SUPPLIES.

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ARCHITECTURAL IRON WORK.

Dietrich Brothers, Baltimore, Md.
Virginia Bridge & Iron Co., Roanoke, Va.

ASPHALT.

Gulf Refining Co., Pittsburgh, Pa.
—(Emulsified.)
Headley Emulsified Products Co., Philadelphia, Pa.
—Filler.
American Limestone Co., Knoxville, Tenn.
—Paving.
Barber Asphalt Co., Philadelphia, Pa.
—Plants.
Simplicity System Co., Chattanooga, Tenn.

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Ernst & Ernst, New York, N. Y.

RABBIT METAL.

Ryerson & Sons, Inc., Jos. T., St. Louis and New York.

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Harnischfeger Corp., Milwaukee, Wis.
National Equipment Corp. (Insley, Parsons), Milwaukee, Wis.

BALLAST (Railroad.)

American Limestone Co., Knoxville, Tenn.

BANKS and TRUST COMPANIES.

Baltimore Commercial Bank, Balto, Md.
Baltimore Trust Co., Baltimore, Md.
Bank of New York & Trust Co., New York City.
First and Merchants National Bank, Richmond, Va.
Provident Savings Bank & Trust Co., Cincinnati, Ohio.

BARGES (Steel.)

American Bridge Co., New York, N. Y.
McClintic-Marshall Co., Pittsburgh, Pa.

BAES (Steel, Rounds, Flats, Hexagon and Squares.)

Carnegie Steel Co., Pittsburgh, Pa.
Gulf States Steel Co., Birmingham, Ala.
Ingalls Iron Works Co., Birmingham.
Ryerson & Sons, Inc., Jos. T., St. Louis and New York.
Sweet's Steel Corp., Williamsport, Pa.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Timken Roller Bearing Co., Canton, O.

Virginia Bridge & Iron Co., Roanoke, Va.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

BATTERIES (Storage.)

Electric Storage Battery Co., Phila., Pa.

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Belmont Iron Works, Philadelphia, Pa.
Carnegie Steel Co., Pittsburgh, Pa.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Ingalls Iron Works Co., Birmingham.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Ryerson & Sons, Inc., Jos. T., St. Louis and New York.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Virginia Bridge & Iron Co., Roanoke, Va.

BEARINGS (Anti-friction.)

Timken Roller Bearing Co., Canton, Ohio.
—(Roller.)
Timken Roller Bearing Co., Canton, Ohio.

BELT (Chain.)

Diamond Chain & Mfg. Co., Indianapolis.
—(Leather, Canvas, Rubber.)
Charlotte Leather Belting Co., Charlotte, N. C.
—Dressing.
Charlotte Leather Belting Co., Charlotte, N. C.
Dixon Crucible Co., Jos., Jersey City, N. J.
—Fasteners.
Flexible Steel Lacing Co., Chicago, Ill.
—Lacing (Steel Hinges.)
Flexible Steel Lacing Co., Chicago, Ill.

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Barber-Greene Co., Aurora, Ill.

BILLETS (Basic Open Hearth.)

Gulf States Steel Co., Birmingham, Ala.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

BINS (Steel Loading.)

Blaw-Knox Co., Pittsburgh, Pa.
Butler Bin Co., Waukegan, Wis.

BLASTING POWDER and Accessories.

Du Pont de Nemours & Co., E. I., Wilmington, Del.

BLINDS (Venetian and Awning.)

Wilson Corp., The J. G., New York.

BLOCKS (Chain.)

Wright Mfg. Co., Bridgeport, Conn.

BOILER REPAIRS.

Finnigan Co., Inc., J. J., Atlanta, Ga.

BOILERS (New.)

Babcock & Wilcox Co., The, New York.
Charleston Dry Dock & Machine Co., Charleston, S. C.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Cole Mfg. Co., R. D., Newman, Ga.
Combustion Engr. Corp., New York, N. Y.
Hedges Walsh Welder Co., Chattanooga, Tenn.
Lombard Iron Works & Supply Co., Augusta, Ga.
Lookout Boiler & Mfg. Co., Chattanooga, Tenn.
Schoffield's Sons Co., J. S., Macon, Ga.
Titusville Iron Works Co., Titusville, Pa.
—(Oil.)
Babcock & Wilcox Co., New York.
—(Scotch Marine.)
Lookout Boiler & Mfg. Co., Chattanooga, Tenn.
—(Used.)
Delta Equipment Co., Philadelphia, Pa.
O'Brien Machinery Co., Philadelphia, Pa.
Randle Machinery Co., The, Cincinnati, O.
Zelnicker Supply Co., W. A., St. Louis.

BOILER SETTINGS.

Babcock & Wilcox Co., New York.

Brooks-Fisher Co., Atlanta, Ga.

—Tubes.

Babcock & Wilcox Co., New York.
National Tube Co., Pittsburgh, Pa.
Ryerson & Sons, Inc., Jos. T., St. Louis and New York.
—Tubes (Charcoal, Iron.)
Reading Iron Co., Reading, Pa.

BOLTS, Rivets, Studs, Washers.

Bethlehem Steel Co., Bethlehem, Pa.
Oliver Iron & Steel Corp., Pittsburgh, Pa.
Progressive Mfg. Co., Torrington, Conn.

Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N. Y.
Ryerson & Sons, Inc., Jos. T., St. Louis and New York.
Virginia Bridge & Iron Co., Roanoke, Va.
—(Track.)
Sweet's Steel Co., Williamsport, Pa.

BOND BUYERS.

Hanchett Bond Co., Inc., The, Chicago.
Law & Co., A. M., Spartanburg, S. C.
Nuveen & Co., John, Chicago, Ill.
Provident Savings Bank and Trust Co., Cincinnati, Ohio.

BOBORINGS (Core.)

Kennedy-Biegler Drilling Co., New York City.
Mott Core Drilling Co., Huntington, W. Va.
Pennsylvania Drilling Co., Pittsburgh, Pa.
Southern Drilling Co., Saltville, Va.
Sprague & Hanwood, Inc., Scranton, Pa.

BOXES (Paper.)

Old Dominion Box Co., Lynchburg, Va.

BRASS GOODS.

Mueller Co., Decatur, Ill.

BRICK (Common Building.)

Friend & Co., Inc., Petersburg, Va.
—(Vitrified, Paving.)
National Paving Brick Assn., Washington, D. C.
—and Clayworking Machy.
Steel & Sons, J. C., Statesville, N. C.

BRIDGE (Operating Machinery.)

Earle Gear & Machine Co., Phila., Pa.
—Slabs.
Kerlow Steel Flooring Co., Jersey City, N. J.
—Timber.
American Crosscutting Co., Louisville, Ky.
Kirby Lumber Co., Houston, Texas.

BRIDGES (Steel.)

American Bridge Co., New York, N. Y.
Belmont Iron Works, Philadelphia, Pa.
Bristol Steel & Iron Works, Inc., Bristol, Va.
Converse Bridge & Steel Co., Chattanooga, Tenn.
Ingalls Iron Works Co., Birmingham, Ala.
McClintic-Marshall Co., Pittsburgh, Pa.
Roanoke Iron & Bridge Works, Roanoke, Va.
Virginia Bridge & Iron Co., Roanoke, Va.

BRONZE (Architectural.)

Heath Company, J. S., Waukegan, Ill.
Michals Art Bronze Co., Covington, Ky.

BUBBLERS.

Rundle-Spence Mfg. Co., Milwaukee, Wis.

BUCKETS (Clam Shell.)

Blaw-Knox Co., Pittsburgh, Pa.
Industrial Brownhoist Corp., Cleveland, O.
Owen Bucket Co., The, Cleveland, Ohio.
Williams Company, G. H., Erie, Pa.

—(Coal.)

Owen Bucket Co., Cleveland, O.

—(Dredging, Excavating, Sewer, etc.)

Owen Bucket Co., The, Cleveland, Ohio.
Stuebner Iron Works, G. L., Long Island City, N. Y.

—(Elevator.)

Hendrick Mfg. Co., Carbondale, Pa.

—(Material Handling.)

Owen Bucket Co., Cleveland, O.

—(Ore Handling.)

Owen Bucket Co., The, Cleveland, Ohio.
Stuebner Iron Works, G. L., Long Island City, N. Y.

—(Rehandling.)

Owen Bucket Co., Cleveland, O.

—(Sand and Gravel.)

Owen Bucket Co., Cleveland, O.

Williams Company, G. H., Erie, Pa.

BUILDERS and Contractors.

Cowper Co., Inc., John W., Washington, D. C.

Lockwood Greene Engrs., Inc., Boston.
Moyer Co., Tilghman, Allentown, Pa.
Thompson & Bros., T. C., Charlotte, N. C.
United Engineers & Constructors, Phila.
White Engineering Corp., J. G., New York.

BUILDINGS (Industrial.)

Belmont Iron Works, Philadelphia, Pa.
Blaw-Knox Co., Pittsburgh, Pa.

Ingalls Iron Works Co., Birmingham.
McClintic-Marshall Co., Pittsburgh, Pa.
Truscon Steel Co., Youngstown, O.
Virginia Bridge & Iron Co., Roanoke, Va.
—(Portable Sheet Metal.)
Birmingham Tank Co., Birmingham.

BULKHEADS.

Shore-Line Builders, Inc., Jacksonville, Fla.
Snare Corp., Frederick, New York, N. Y.

BULLDOZERS.

Trackson Co., Milwaukee, Wis.

BURLAP.

Fulton Bag & Cotton Mills, Atlanta, Ga.

BUSINESS METHODS.

Ernst & Ernst, New York, N. Y.

CABLE (Elevator.)

American Steel & Wire Co., Chicago, Ill.
Roebbling's Sons Co., John A., Trenton, N. J.

—and Wire (Electric.)

American Steel & Wire Co., Balto, Md.
Roebbling's Sons Co., John A., Trenton, N. J.
Western Electric Co., New York City.

CALCIUM CHLORIDE.

Grasselli Chemical Co., Inc., Birmingham.

CAN and Box-Making Machinery (Tin.)

Bliss Co., E. W., Brooklyn, N. Y.

CANNING MACHINERY.

Robins & Co., A. K., Baltimore, Md.

CANVAS.

Fulton Bag & Cotton Mills, Atlanta, Ga.

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Barber-Greene Co., Aurora, Ill.

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Atlas Car & Mfg. Co., The, Cleveland, O.
Southern Iron & Equipment Co., Atlanta.

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Mountain State Steel Foundries, Parkersburg, W. Va.

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Richmond Foundry & Mfg. Co., Richmond, Va.
Savannah Mch. & Fdry. Co., Savannah, Ga.

—(Chilled Iron.)

Fuller Lehigh Co., Fullerton, Penna.

—(Gray Iron.)

Fuller Lehigh Co., Fullerton, Penna.
Gammorgan Pipe & Fdy. Co., Lynchburg, Va.

Jefferson Foundry Co., Birmingham, Ala.

National Cast Iron Pipe Co., Birmingham, Ala.

Richmond Foundry & Mfg. Co., Richmond, Va.

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Savannah Mch. & Fdry. Co., Savannah, Ga.

Schofield's Sons Co., J. S., Macon, Ga.

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Bethlehem Steel Co., Bethlehem, Pa.

Crucible Steel Casting Co., Lansdowne, Delaware Co., Pa.

Lunkensheimer Co., Cincinnati, Ohio.

Mountain State Steel Foundries, Parkersburg, W. Va.

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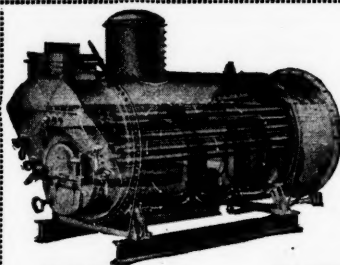
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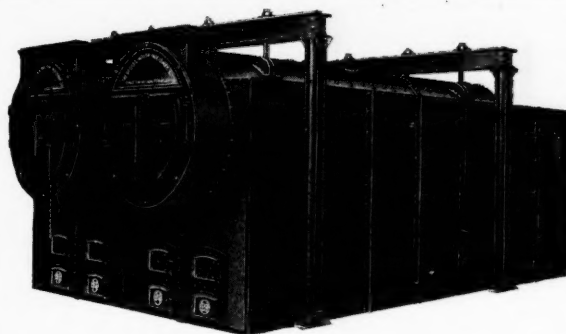
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Picard Laboratories, Birmingham, Ala.
Pittsburgh Testing Laboratories, Pittsburgh, Pa.
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—Inspected and Repaired.
Northwestern Chimney Constr. Co., Cleveland, O.

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—Washers.
Steward Machine Co., Chas. C., Birmingham, Ala.

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Cement Gun Construction Co., Chicago.
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Federal-American Cement Tile Co., Chicago.

—Mixers.
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National Equipment Corp. (Insley Division), Milwaukee, Wis.

—Roofing Tile.
Federal-American Cement Tile Co., Chicago.

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Westinghouse Electric & Mfg. Co., E. Pittsburgh, Pa.

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Youngstown Sheet & Tube Co., Youngstown, Ohio.

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Atlantic Gulf and Pacific Co., New York.

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Walker Electrical Co., Atlanta, Ga.
Warner Service Co., Knoxville, Tenn.
Webb Electric Co., Anderson, S. C.

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Snare Corp., Frederick, New York, N. Y.

—(General.)
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Burkes, Inc., J. V. & R. T., New Orleans.

Cornell Young Co., Inc., Macon, Ga.
Copper Co., Inc., John W., Washington, D. C.

Fiske-Carter Constr. Co., Greenville, S. C.
Gridley Constr. Co., Lee A., Knoxville, Tenn.

Saville, Inc., Allen J., Richmond, Va.
Smallman-MacQueen Construction Co., Birmingham.

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Thompson & Bros., T. C., Charlotte, N. C.

Tucker & Laxton, Charlotte, N. C.
White Engineering Corp., J. G., New York.

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Copper Co., Inc., John W., Washington, D. C.

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Smallman-MacQueen Construction Co., Birmingham.

Snare Corp., Frederick, New York, N. Y.
Thompson & Bros., T. C., Charlotte, N. C.

Tucker & Laxton, Charlotte, N. C.
Virginia Engineering Co., Inc., Newport News, Va.

White Engineering Corp., J. G., New York.

—(Mill Village.)
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—(Power Piping.)
Pittsburgh Piping & Equip. Co., Pittsburgh, Pa.

Poe Piping & Heating Co., Greenville, S. C.

—(Power Plants.)
Snare Corp., Frederick, New York, N. Y.
Virginia Engineering Co., Inc., Newport News, Va.

—(Railroad.)
Cornell-Young Co., Inc., Macon, Ga.

—(Reinforced Concrete.)
Blair, Algernon, Montgomery, Ala.
Cement Gun Construction Co., Chicago.

Guntle Conc. & Constr. Co., Kansas City.
Tucker & Laxton, Charlotte, N. C.

—(Road and Street Paving.)
Fiske-Carter Constr. Co., Greenville, S. C.
Gridley Constr. Co., Lee A., Knoxville, Tenn.

Hornbuckle Contracting Co., Atlanta, Ga.
McCrory Co., J. B., Atlanta, Ga.

Virginia Engineering Co., Inc., Newport News, Va.

—(Sewerage and Waterworks.)
Gridley Constr. Co., Lee A., Knoxville, Tenn.

Hardaway Contracting Co., Columbus, Ga.
Hornbuckle Contracting Co., Atlanta, Ga.

McCrory Co., The J. B., Atlanta, Ga.
Snare Corp., Frederick, New York, N. Y.

Tucker & Laxton, Charlotte, N. C.
Virginia Engineering Co., Inc., Newport News, Va.

—(Sprinkler System.)
Poe Piping & Heating Co., Greenville, S. C.

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Lima Excavator Sales Agency, Lima, Ohio.

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Clark Tractor Co., Battle Creek, Mich.
Fairfield Engr. Co., Marion, Ohio.

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Niagara Blower Co., New York, N. Y.

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Continental Gin Co., Birmingham, Ala.

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—(Crawler.)
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Thew Shovel Co., The, Lorain, Ohio.

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Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

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Bedford Foundry & Machine Co., Bedford, Ind.

Harnischfeger Corp., Milwaukee, Wis.

—(Full Circle Steam and Electric.)
Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

—(Gasoline.)
Harnischfeger Corp., Milwaukee, Wis.
Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

—(Locomotive.)
Bucyrus-Erie Co., So. Milwaukee, Wis.
Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

—(Material Handling.)
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Industrial Brownhoist Corp., Cleveland, O.

Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

Universal Crane Co., Lorain, Ohio.

—(Traveling Hand Power.)
Wright Mfg. Co., Bridgeport, Conn.

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Trackon Co., Milwaukee, Wis.

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Atlantic Creosoting Co., Norfolk, Va.

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Brown Wood Preserving Co., Louisville, Ky.

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Amer. Creosote Wks., Inc., New Orleans.
Ayer & Lord Tie Co., Inc., Chicago.

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Amer. Creosote Wks., Inc., New Orleans.
Amer. Creosoting Co., Inc., Louisville, Ky.

Atlantic Creosoting Co., Norfolk, Va.
Brown Wood Preserving Co., Louisville, Ky.
Eppinger & Russell Co., New York, N. Y.

Gulf States Creos. Co., Hattiesburg, Miss.

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Amer. Creosoting Co., Inc., Louisville, Ky.

Atlantic Creosoting Co., Norfolk, Va.

—(Zinc Meta Arsenite Treated.)
Curtin-Howe Corp., New York, N. Y.

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Amer. Creosote Wks., Inc., New Orleans.
Amer. Creosoting Co., Inc., Louisville, Ky.

Atlantic Creosoting Co., Norfolk, Va.
Ayer & Lord Tie Co., Inc., Chicago.

Eppinger & Russell Co., New York, N. Y.

—(Zinc Meta Arsenite Treated.)
Curtin-Howe Corp., New York, N. Y.

CRUSHED STONE (Road Concrete and Ballast.)
American Limestone Co., Knoxville, Tenn.

Buxley & Co., W. W., Roanoke, Va.

CRUSHERS (Coal and Coke.)
Fuller Lehigh Co., Fullerton, Pa.
Steward Machine Co., Chas. C., Birmingham, Ala.

—(Rock.)
Diamond Iron Works, Minneapolis, Minn.

Gründler Crusher & Pulverizer Co., St. Louis, Mo.

Universal Crusher Co., Cedar Rapids, Ia.

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Allis Chalmers Mfg. Co., Milwaukee, Wis.

Diamond Iron Works, Minneapolis, Minn.
Fuller Lehigh Co., Fullerton, Pa.

Gründler Crusher & Pulverizer Co., St. Louis, Mo.

Traylor Engr. & Mfg. Co., Allentown, Pa.

Universal Crusher Co., Cedar Rapids, Ia.

CULVERT PIPE (Cast Iron.)
Amer. Cast Iron Pipe Co., Birmingham.

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Andrews Co., A. H., Chicago, Ill.

DITCHING MACHINERY.
Barber-Greene Co., Aurora, Ill.

Bay City Shovels, Inc., Bay City, Mich.
Harnischfeger Corp., Milwaukee, Wis.

Industrial Brownhoist Corp., Cleveland, O.
Northwest Engineering Co., Chicago, Ill.

Ohio Power Shovel Co., Lima, Ohio.

DOORS (Bronze.)
Michals Art Bronze Co., Covington, Ky.

—(Fire.)
Merchant & Evans Co., Philadelphia, Pa.

—(Fireproof, Air Chamber.)
Wilson Corp., The J. G., New York.

—(Revolving.)
Michals Art Bronze Co., Covington, Ky.

—(Rolling, Steel and Wood.)
Wilson Corp., The J. G., New York.

—(Steel.)
Truscon Steel Co., Youngstown, Ohio.

—(Vault.)
York Safe & Lock Co., York, Penna.

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Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.

Thew Shovel Co., The, Lorain, Ohio.

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Bucyrus-Erie Co., So. Milwaukee, Wis.

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Dow & Smith, New York, N. Y.
Moss, Jr., W. Wade, Columbus, Ga.
Picard Laboratories, Birmingham, Ala.
Pittsburgh Testing Laboratories, Pittsburgh, Pa.

—(Civil.)
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Greiner & Co., J. E., Baltimore, Md.
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Hills and Youngberg, Jacksonville, Fla.
Huey, S. E., Monroe, La.
MacElwhee & Crandall, Inc., Cambridge, Mass.

Main, Inc., Chas. T., Boston, Mass.
Steel & Leiby, Knoxville, Tenn.
White Engineering Corp., J. G., New York.

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Wiley & Wilson, Lynchburg, Va.

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Goder, Joseph, Chicago, Ill.
Harza Engineering Co., Chicago.

Hedrick, Inc., Ira G., Hot Springs, Nat'l. Park, Ark.
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Main, Inc., Chas. T., Boston, Mass.

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Whitman, Requaardt & Smith, Balto., Md.

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Barstow & Co., W. S., New York City.

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Gardner & Howe, Memphis, Tenn.
Hardaway Contracting Co., Columbus, Ga.

Harza Engineering Co., Chicago.
Hedrick, Inc., Ira G., Hot Springs, Nat'l. Park, Ark.

Lee Engineering Corp., William S., Charlotte, N. C.
Main, Inc., Chas. T., Boston, Mass.
Serrine & Co., J. E., Greenville, S. C.

Tucker & Laxton, Charlotte, N. C.
White Engineering Corp., J. G., New York.
Wiley & Wilson, Lynchburg, Va.

—(Drainage and Irrigation.)
Cramer, Robert, Milwaukee, Wis.
Hills and Youngberg, Jacksonville, Fla.

Huey, S. E., Monroe, La.
—(Efficiency.)
Ernst & Ernst, New York, N. Y.

Whitman, Requaardt & Smith, Balto., Md.
—(Electrical.)
Engineering Service Corp., Houston, Tex.

Hoosier Engineering Co., Chicago, Ill.
Lee Engineering Corp., William S., Charlotte, N. C.
Lockwood Greene Engrs., Inc., New York.

Main, Inc., Chas. T., Boston, Mass.
Sanderson & Porter, New York, N. Y.
Tucker & Laxton, Charlotte, N. C.

White Co., Gilbert C., Durham, N. C.
Wiley & Wilson, Lynchburg, Va.

—(Electric-Light and Power Plants.)
Barstow & Co., W. S., New York City.

Byllesby Engineering and Management Corp., Chicago, Ill.
Cramer, Robert, Milwaukee, Wis.

Lee Engineering Corp., William S., Charlotte, N. C.
Main, Inc., Chas. T., Boston, Mass.

Sanderson & Porter, New York, N. Y.
Scotfield Engineering Co., Philadelphia.
Tucker & Laxton, Charlotte, N. C.

White Engineering Corp., J. G., New York.
White Co., Gilbert C., Durham, N. C.
Wiley & Wilson, Lynchburg, Va.

—(Flood Control.)
Harza Engineering Co., Chicago.

—(Gas.)
Byllesby Engineering and Management Corp., Chicago, Ill.

Huey, S. E., Monroe, La.
—(Geological.)
De Kalb, Courtenay, New York City.

Froehling & Robertson, Richmond, Va.
Moss, Jr., W. Wade, Columbus, Ga.
Wadleigh & Bailey, Washington, D. C.

—(Harbor Improvements.)
Engineering Service Corp., Houston, Tex.

—(Heating.)
Wiley & Wilson, Lynchburg, Va.

—(Hydraulic.)
Alpaugh & Sons, Chas. W., Manassas, Va.

Harza Engineering Co., Chicago.
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Gulf Refining Co., Pittsburgh, Pa.
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Lunkenheimer Co., The, Cincinnati, O.
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- ORNAMENTAL BRONZE WORK.**
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Michaels Art Bronze Co., Covington, Ky.
—Iron Work.
Austin Bros. Bridge Co., Atlanta, Ga.
Roanoke Iron & Bridge Wks., Roanoke, Va.
Snead Architectural Iron Works, Louisville, Ky.
Southern Engineering Co., Charlotte, N. C.
- PAINT (Metal Surfaces.)**
Dixon Crucible Co., Jos., Jersey City, N. J.
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Sonneborn Sons, Inc., L., New York.
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Adam Electric Co., Frank, St. Louis.
- PARTITIONS (Sectionfold, Rolling, Wood.)**
Wilson Corp., The, J. G., New York.
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Coleman, Watson E., Washington, D. C.
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Sarnett, Edward C., Washington, D. C.
Seymour & Bright, Washington, D. C.
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Haas Pattern Co., A. W., Atlanta, Ga.
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- Brick.**
National Paving Brick Assn., Washington, D. C.
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National Equipment Corp. (Koehring, T. L. Smith), Milwaukee, Wis.
- Plant (Asphalt.)**
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Chicago Bridge & Iron Wks., Birmingham.
Newport News Shipbuilding & Dry Dock Co., Newport News, Va.
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Smith Co., S. Morgan, York, Pa.
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Erle Perforating Co., Rochester, N. Y.
Harrington & King Perf. Co., Chicago.
Hendrick Mfg. Co., Carbondale, Pa.
Manhattan Perforated Metal Co., Inc., Long Island City, N. Y.
Mundt & Sons, Charles, Jersey City, N. J.
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Amer. Creosoting Co., Inc., Louisville.
Atlantic Creosoting Co., Norfolk, Va.
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Hyman-Michaels Co., Chicago, Ill.
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Cast Iron Pipe Research Assn., Chicago.
Glamorgan Pipe & Fdry. Co., Lynchburg, Va.
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Greenpoint Iron & Pipe Co., Inc., Brooklyn, N. Y.
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Marine Metal & Supply Co., New York.
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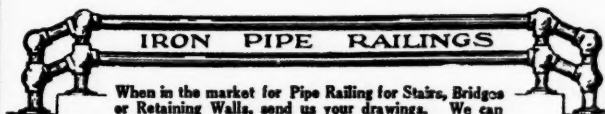
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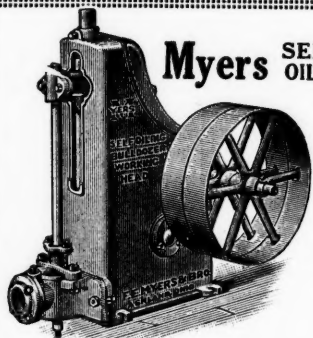
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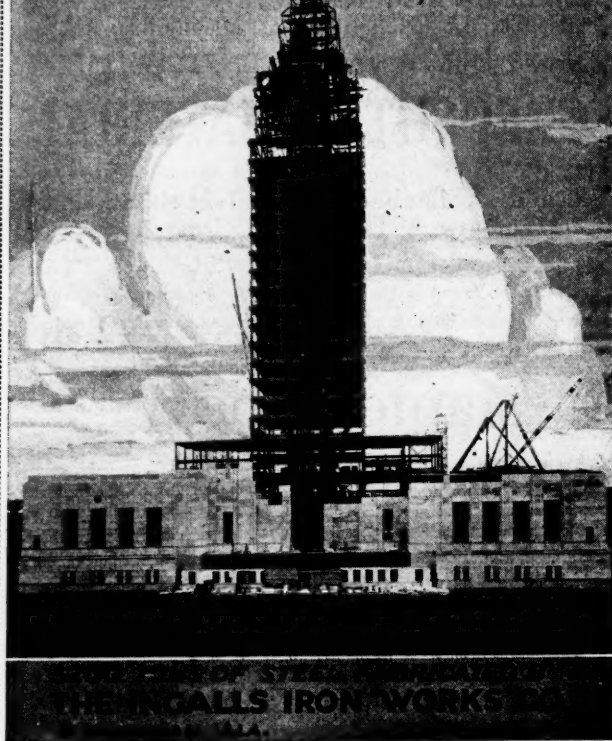
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Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
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Ingalls Iron Works Co., Birmingham, Ala.
Lombard Iron Works & Supply Co., Augusta, Ga.
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Virginia Bridge & Iron Co., Roanoke, Va.

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Virginia Bridge & Iron Co., Roanoke, Va.

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—(Cold Rolled.)
American Steel & Wire Co., Balto., Md.

—(Fabricators.)
United Welding Co., Middletown, O.

—(Special Analysis.)
Timken Roller Bearing Co., Canton, Ohio.

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Bethlehem Steel Co., Bethlehem, Pa.

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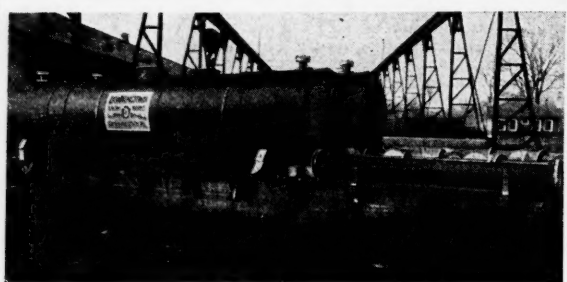
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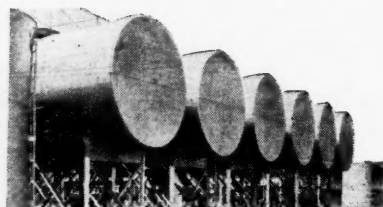
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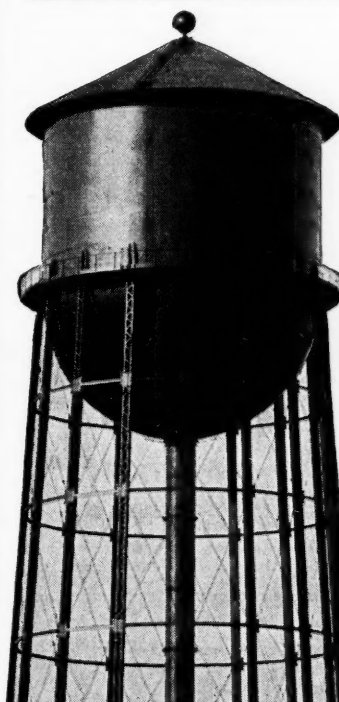
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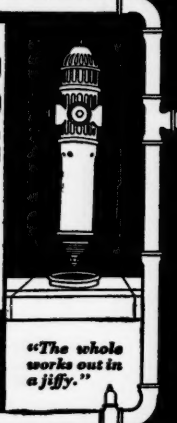
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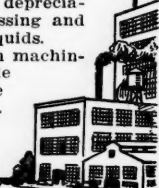


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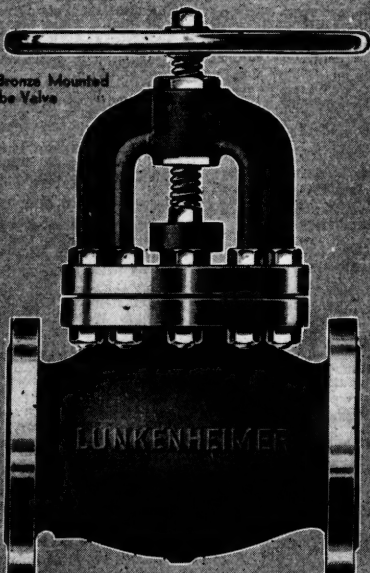
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[illegible]

Advs. marked † not in this issue. **Classified Opportunities** } Pages 58-59 **Proposal Advertisements** } Pages 57-58 **Resale Department** } Pages 59 to 61
 Advs. marked ‡ appear in first issue of month.
 Advs. marked § appear every other week.

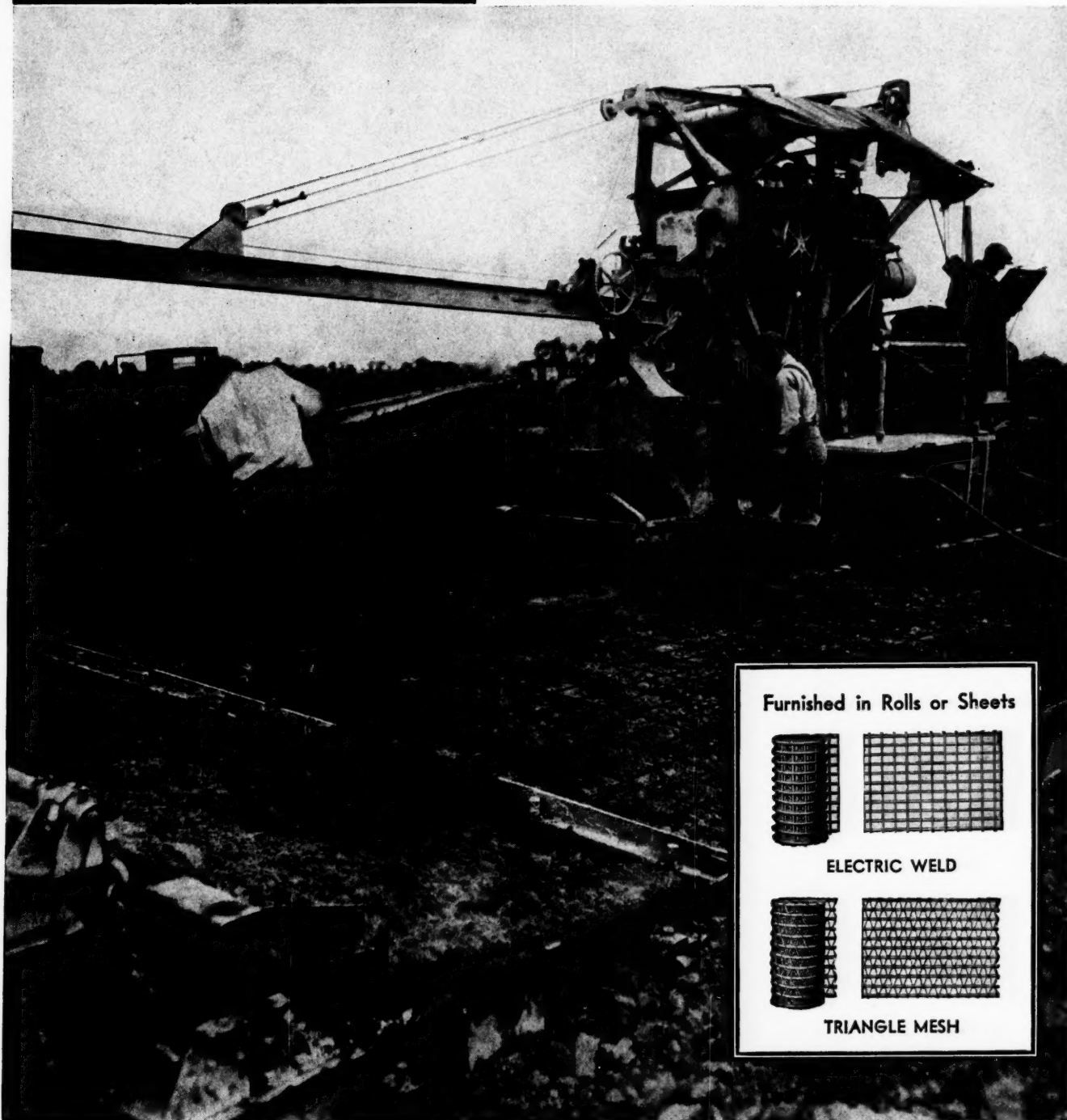
"We have furnished more Complete and Partial Pulley and Shafting Equipment to Cotton Mills than any other manufacturer in the United States"

AMERICAN STEEL & WIRE COMPANY

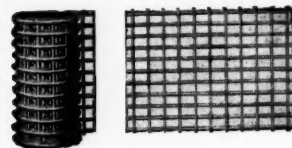
**WIRE
FABRIC****Building Good Roads and Streets Better**

Highway departments have solved the problem of "better" good roads and streets by standardizing on wire fabric reinforcement. The life of the pavement is increased and the problem of costly and disfiguring tar kettle maintenance is eliminated.

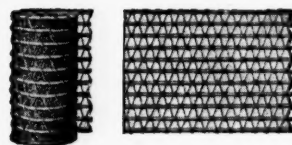
For reasons why—write for a copy of "Reinforced Roads & Streets" and "Reasons".



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TRIANGLE MESH

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1931

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The "Caterpillar" Sixty Leaning Wheel

Grader proves the value of Timken Bearings

in licking tough road building jobs. 12 Timkens

are used in this model, 4 in the front wheels, 4 in

the rear wheels, 2 on the blade lift worms and 2 on the

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revolve freely under all loads. Worm shafts are held in alignment.

Power and lubricant are saved and the entire mechanism safeguarded

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TIMKEN *Tapered
Roller* **BEARINGS**

